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Heritage-based design

Paul Meurs

TU Delft OPEN Publishing

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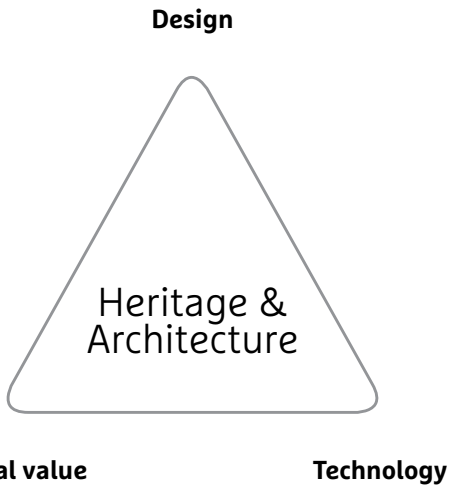
Heritage and Architecture

The Heritage and Architecture section (H&A) is responsible for one of the sub-tracks in the Master of Architecture programme of the Faculty of Architecture and the Built Environment of Delft University of Technology (TU Delft). There are about 60 graduates each year. Heritage & Architecture – as the name suggests – concerns the design of interventions to monuments or sites of cultural heritage quality. All kinds of interventions are possible, ranging from restoration to radical innovation. The central theme of the design didactics is that the cultural heritage value of a site is the starting point for the design. The ambition of H&A is to make it obvious for designers to base their thinking on the qualities of a site – at the same time not giving up the freedom to make their own design choices.

The ambition of H&A is to make it obvious for designers to base their thinking on the qualities of a site – at the same time not giving up the freedom to make their own design choices. There is no such thing as standard solutions or a standard architectural style for building in a historical context. Basically everything is possible - from historicising retro to a futuristic alien – as long as the intervention relates to the unique existing values of the site and (if possible) adds significance to them. The question is what fits on a specific site and how a concept can be developed logically, consistently and skilfully within the context. What counts is the approach (start off from what is present) and a sensitivity for all the special elements to be found on a site that might add value to the design: buildings, fragments, structures, greenery, but also the stories and hidden meanings that give a site its vitality. As designers, students are encouraged to take a position: how can the cultural heritage value gain relevance for the future, and in what way can a transformation contribute to this and also add new quality?

The triangle of H&A

Heritage & Architecture approaches the design challenge from three angles, which correspond to the chairs Heritage & Cultural Value, Heritage & Technology and Heritage & Design. The cultural value is the starting point for the design, which in its turn is further specified and defined by the technology – with the focus on conservation as well as on the details of the new design. The design approach can be symbolised by a triangle, with cultural value and technology as the basis for the design.



Cooperation with RBK

The aim of the Foundation Rondeltappe-Bernoster-Kemmers (RBK) is the acquisition, management, maintenance and preservation of national monuments. The fact that the foundation takes a broad view of this task became apparent some years ago - when it approached TU Delft with the marvellous offer to invest in education. This was the reason for Heritage & Architecture to describe design didactics in a series of publications aimed at its own students, designers and all those who care about monuments. The first part 'Durable past, sustainable future' appeared in 2014 and was written by Prof. Rob van Hees (Heritage & Technology chair), dott. Silvia Naldini (Heritage & Technology) and Job Roos MSc (Associate Professor Heritage & Design).

This second part of the series concerns the relationship between design approaches and the cultural heritage essence of a monument. How to approach a design? How to get a grip on a site? How can a designer incorporate existing qualities of the heritage in the design? Chapter 1 describes the trends in the Netherlands, a development which has led to heritage policy becoming increasingly linked to spatial planning and development issues, and resulting in the fast growing importance of design for heritage. Chapter 2 focuses on the cultural heritage value - and in particular on the question of how a designer can achieve a translation of the cultural heritage essence of a site into concrete design principles. Chapter 3 shows how a designer can take a position by relating to the cultural heritage value and by subsequently reinterpreting this in his own way.

Prof. Paul Meurs
Chair Heritage & Cultural Value

FIG. 1.1 Extension Het Klooster, Vught. Marx & Steketee Architecten, 2000.

1 – Trends in heritage

For several years there has been a demand in the Netherlands for architectonic interventions in monuments and on sites of cultural heritage value. There is broad support for a responsible approach to heritage.

Monument policy links the conservation of heritage to sound economic exploitation – which in many cases leads to major renovations and transformations of heritage.[1]

As long as those conversions take place carefully, with the focus on the unique qualities of the heritage, there are many possibilities. In principle, a design for the transformation of a monument is not seen as an infringement, but as a possible enrichment. It is not a coincidence that for a number of years the heritage sector has been speaking of 'conservation through development'.[2] The design of interventions in heritage is (has become) also important for contemporary architecture. Architects are actively involved in themes like authenticity, identity, contextual design and renewal of the building tradition [FIG. 1.1–1.2].

FIG. 1.2 Watchtower Kalverpolder, Zaandam. Daf-Architecten, 2013. The design is inspired by the construction tecnhique of the windmills in the region.

1 Ministry of Education, Culture and Science, *Beleidsbrief Modernisering van de Monumentenzorg*, The Hague, 2009.

2 This expressions became spread in The Netherlands with the implemention of the so-called Belvedere-policy on integrated heritage conservation. Ministries of OCW, V&W, LNV and VROM, *Nota Belvedere*, The Hague 1999.

FIG. 1.3 Mercat Santa Catarina, Barcelona (Spain). Enric Miralles and Benedetta (Embt), 2005.

In this way, heritage offers fertile ground for architectonic innovation. By now, more than half of the annual yield of best projects in the Architectural Yearbook consists of redesign, with lots of interventions in heritage.[3]

These days architects, project developers, local communities and the heritage sector all have the best of intentions when it comes to heritage. Everyone is aware of the major importance and high potential of heritage as an enrichment of the cities and villages of the future. There is also a widespread feeling that architectonic interventions are (can be) necessary to give heritage a new life, sound exploitation and social relevance [FIG. 1.3]. But how much new architecture can a monument handle [FIG. 1.4]?[4] Is there a limit to the extent to which monuments can be transformed? What is the secret of a successful intervention in a monument, and is there a specific design approach for this kind of success?

3 Tom Avermaete, Hans van der Heijden, Edwin Oostmeijer and Linda Vlassenrood, *Architectuur in Nederland 2014/2015*, Rotterdam 2015.

4 M.C. Kuipers and W.J. Quist (ed.), *Culturele draagkracht. Op zoek naar de tolerantie voor verandering bij gebouwd erfgoed*, Delft 2013.

FIG. 1.4 Strijp R, RAG Building, Eindhoven. Piet Hein Eek, 2015.

In the twentieth century different standards were developed for conservation, restoration and design in a historical context. These standards were laid down in declarations which were named after the exotic places where they were drawn up by the experts, such as Athens (1931), Venice (1964), Quito (1967), Amsterdam (1975), Dresden (1982), Washington (1987), Nara (1994), Burra (1999) and Vienna (2005).[5] These documents stipulate how to deal with certain aspects of conservation or restoration of heritage. However, now that dozens of charters, memorandums, conventions and recommendations have been drawn up, it is difficult to find the right course for your project. Architects sometimes quote from any of the charters to aspects parts of their proposals (for instance: additions should be recognisable) without having any clue of the full extend of the principles they refer to. A further complicating factor is the lack of clear terms and definitions. You could easily fill a dictionary with heritage language and heritage jargon. Some terms are precisely defined, for example by UNESCO in the case of authenticity and integrity.[6] Other terms are used at random, such as identity, harmony or 'appropriate' renewal. While some would say that a particular renewal fits excellently into a historical context, others might see that same intervention as a dreadful infringement on the ensemble. It is said of the Eskimos that they have thirty different words for snow. The heritage world, too, is guilty of this when it comes to the terms we use for all the things we do to our heritage: restoration, conservation, renovation, recycling, revitalising, reconceptualisation, simulation, transformation, modification, intervention, repair, maintenance, upgrading, adaptive re-use, redevelopment, musealisation, gentrification, major overhaul ... In the day-to-day practice, all these terms are used haphazardly and lack of clarity rules. Ask a number of experts to explain the difference between 'conservation' and 'preservation' - and you're certain to get a number of different answers.

Confused? You're not the only one. The heritage world is going through an exciting and turbulent phase of reorientation. The dogmas of the past on how to deal with heritage are no longer obvious for all the heritage assignments. The age-old contradiction (in The Netherlands) between modernisation and conservation no longer exists. A new urban quality emerges from the loving and creative fusion of the old and the new. The conceptual, scientific and social context of heritage has changed drastically.

5 Michael Petzet and John Ziezemer (ed.), 'International Charters for Conservation and Restoration', *Monuments and Sites* (Icomos), 2004.

6 Authenticty and integrity are defined in: Unesco, *Operational Guidelines* 2015), paragraphs 79-95 (www.unesco.org/en/guidelines).

Objectives, strategies and principles of dealing with heritage should be redefined, but a common new language to describe, determine and judge interventions in heritage does not yet exist. There are, however, many developments in progress. A (partly) renewed approach of the transformation challenges for cultural heritage is gradually taking shape. A number of trends is described in this chapter.

From monument to heritage

By definition, monuments have always been exceptional objects: masterpieces of architecture or symbols of our culture.[7] All the monumental buildings together used to form an imaginary museum collection of the best and most special witnesses of the built-up past. Although monuments still exist (they are even more numerous than ever), the policy focus has shifted from monuments to heritage. Thus, Bureau for Cultural Property Care has become the Cultural Heritage Agency. Heritage does not focus on a 'stamp collection' of exceptional buildings, but is all-embracing. It covers loose objects (movable heritage), buildings (built heritage), urban structures, landscapes, archaeology, traditions and stories (intangible heritage). Heritage is about the presence of the past in contemporary life. It often says more about the present than about the past. Heritage can be constructed and consumed. It can also be used to develop strategies and new concepts for our cities. As a modern construction, heritage is sometimes dismissed as a falsification of history, as something that is really very artificial. In the words of the American historian David Lowenthal: 'In searching for our heritage we find the past we want to find.'[8]

FIG. 1.5 Heritage as experience: Zaanse Schans, Zaandam.

However, the emergence of heritage as a widespread social phenomenon has contributed to the fact that monuments have become less elitist and reach a larger audience. The annual Open Monuments Day in the Netherlands attracts as many as 900.000 visitors.[9] A result of the shift from monuments to heritage is that the (personal) experience of the past is becoming more and more important, causing the scientifically pure conservation to (sometimes) move into the background: 'museal' conservation is not what matters, but to create a sense of the past [FIG. 1.5]. An important point here is that authenticity means a lot when experiencing heritage. How can (the sense of) authenticity be maintained or reinforced in a heritage practice where we dare to renew and intervene in monuments more and more drastically?

7 The Monuments Act 1988 defines monuments as all objects that are of general interest because of their historic, popular, artistic, scientific, industrial-archaeological or other social-cultural value.

8 Tracy Metz, 'Gesprek met erfgoedhistoricus Davind Lowenthal', NRC Handelsblad, 6 december 2002. David Lowentahl, *The Heritage Crusade and the Spoils of History,* Cambridge 1998.

9 Open Monumentendag 2013 in cijfers, www.openmonumentendag.nl (geraadpleegd 5 juni 2015)

FIG. 1.6 The monument as exceptional building: O.L. Vrouwekerk, Veere.

FIG. 1.7 Monument of everyday life: shops and apartments of the Lijnbaan (listed in 2012).

From palaces to working class housing

Hundred years ago only a handful of exceptional buildings had the status of a protected monument [FIG. 1.6]. You could say that the monument status was almost equal to an expropriation, because being a monument actually became the most important function of a protected building.
In return, the government bore (a large share of) the costs of maintenance and restorations. But that same government also laid down conditions for interventions to comply with, was involved in the selection of the restoration architects, issued monument permits and carried out enforcement action. So state monument care ended up in a sort of parallel reality, quite separate from the normal social and economic dealings involving ordinary real estate.

During the twentieth century, the monument list kept expanding. A lot was added and almost nothing was ever removed [FIG. 1.7]. Other authorities also started to appoint monuments.

At present there are so many municipal monuments, provincial monuments, national monuments, protected cityscapes and villagescapes and world heritage sites, that a monument status is no longer at all exceptional. Moreover, there are more cathegories than just monuments, such as: iconic buildings, buildings with iconic properties and focus areas for reconstruction. Sometimes it seems as if the whole country has become heritage![10] A spatial assignment without a cultural heritage component is almost unthinkable in the Netherlands. Just like the urban sprawl, a term for the diversified urbanisation which has spread across the country like a fine spray, there is also a heritage sprawl [FIG. 1.8].[11]

10 Henri Pierre Jeudy, *Die Welt als Museum*, Berlin 1987; Bruno Pedretti and Vittorio Gregotti, *Il progetto del passato, memoria, conservazione, restauro, architettura*, Milan 1997.

11 Paul Meurs, 'City and Cultural History', in: Han Meijer and Leo van den Burg (ed.), *The Memory of the City, Amsterdam* 2006, 19.

Heritage sprawl in The Netherlands

- Belvedere areas
- World heritage
- Belvedere cities

FIG. 1.8 Heritage sprawl in The Netherlands: urban conservation areas, zones of specific cultural interest ('Belvedere areas', 1999) and World Heritage sites Research SteenhuisMeurs, 2003.

The overall care for heritage is organised via the Monuments and Historic Buildings Act[12] and spatial legislation. Traditionally, on the basis of this Act, a protected status can be granted to buildings or areas – with all kinds of legal consequences: a special licence is required to change or demolish monuments, which is compensated by certain (financial) benefits. However, heritage policy is also gradually being formed by spatial planning – for which there are completely different laws. Since 2012, it has been mandatory in the Netherlands to make an inventory of cultural heritage values for each spatial plan, such as a zoning plan, and to stipulate how to deal with these values in the future.[13] This does not only concern buildings, but also landscape, urban development, the outdoor area and the green structure. This obligation can be interpreted in different ways. For some it might seem that the Netherlands is in danger of becoming a ridiculous and sterile museum, leaving no room for innovation and renewal. Instead of looking towards the future, we are only looking back, to a (romanticised) past. That past has become our utopia. For others, this trend demonstrates how well heritage care has emancipated and become part of the debate on spatial quality and a humane living environment. In this interpretation, heritage values are not static, but dynamic. Depending on the nature of the heritage and the social context, it can be dealt with in all sorts of ways: sometimes by conserving all of it, sometimes by grafting new developments onto the heritage – thereby transferring the heritage values to the new development – and sometimes by setting aside the existing entity and opting for rigorous innovation.

The large number of monuments, whether or not protected, implies that everyday buildings too are regarded as heritage. This means that maintenance and transformation are carried out in an everyday way, largely with standard budgets. The challenge is to find specific solutions for ordinary interventions such as maintenance, sustainability, adjustments to the use or adaptive re-use.[14] That situation makes it unrealistic to make excessive demands on a permit, unless such demands are compensated by tax benefits, subsidies, reduced document duties or cheap loans. In that case the question is what value remains of a monument status. What distinguishes heritage from the rest of the built-up environment?

From craft-based to industrial heritage

Most of the present heritage is relatively young. We are focusing mainly on the 20th century legacy – which forms the bulk of current building stock. The nature of this young heritage is different from the nature of the 'traditional' monuments dating from before 1850. Young heritage is characterised by large numbers with repetitive patterns in (identical) series [FIG. 1.9]. It is often made of industrially manufactured products (that sometimes have to be restored with artesenal techniques, as the products are not on the market anymore) and was based on nowadays outdated ideologies, like those regarding the makeable society. Less than is the case with older monuments, the cultural heritage value lies in building craftsmanship or the artistic talents of the professional. Typological, conceptual or associative values more often dominate. Because of the specific nature of modern heritage, the (older) conventions of heritage care do not always automatically apply. What is the meaning of authenticity when you look at mass residential development? How exceptional are building types (housing for the elderly, apartment buildings, gallery-access flats) or neighbourhoods that sprung up all over the country during certain periods?

12 The Monument Act 1988 was incorporated in a new Heritage Act in January 2016.

13 Ministry of Infrastructure and Environment (I&M), *Besluit Ruimtelijke Ordening* (Decision on Spatial Planning), The Hague 2012.

14 Rob van Hees, Silvia Naldini and Job Roos, *Durable past, sustainable future*, Delft 2014.

FIG. 1.9 Sloterhof, Amsterdam, J.F. Berghoef (1959). The Nemavo-Airey building system was used to create an ensemble of 14 apartment buildings and 4 towers, with shops, garages and other facilities.

Should we cherish as monuments the examples of industrial building systems that have remained intact (Airey, Van Wijnen) – and if so, what exactly should we conserve? Is functionalistic architecture (in which form follows function) still relevant when the functions have disappeared? What do we want to achieve by protecting post-war residential areas? At the time, they appeared in architecture magazines and were even internationally renowned, but these days they are mainly seen as monotonous, as an outdated and insufficiently diversified housing stock, with problematic public space, shabbiness and the need for upgrading, sometimes radical transformation, functional blending, diversification and a design for the outdoor area.

From objects to areas

The concept of heritage as a collection has given way to the concept of the historical cultural landscape in which buildings, green space and water, urban structures and the landscape are inter-dependent. Such an (urbanised) landscape can be regarded as heritage, but can obviously not be put under glass and be frozen in time. Area-oriented heritage care is much more about giving form to (appropriate) change than about overall conservation.

FIG. 1.10 Droogmakerij De Beemster: an entire municipality as world heritage.

From the heritage perspective, the ambition is to keep the 'historic urban landscape' (HUL) recognisable, including characteristic places and structures.[15] At the same time, such a landscape is inconceivable without possibilities for renovation, change and innovation. It is a multi-layered environment, in which the layers that have resulted from developments in the past remain partly in place (recognisable, hidden, sometimes just under the surface).

In area-oriented heritage care, conservation and development issues overlap. This is apparent, for example, in the Beemster polder, where the municipality as a whole is listed as a world heritage site [FIG. 1.10]. Every spatial issue, however minor (traffic, water management, agriculture) immediately becomes a (world) heritage issue.[16] Another example of large scale heritage are the old defence lines in the landscape.

15 Francesco Bandarin and Ron van Oers, *The Historic Urban Landscape, Managing Heritage in an Urban Century*, Hoboken NJ (USA) 2012.

16 Bureau Venhuizen, SteenhuisMeurs and REDscape, *Des Beemsters (development vision for the world heritage site)*, Rotterdam 2006.

FIG. 1.11 Stelling van Amsterdam: a world heritage site of almost 15.000 ha that extends 135 km around Amsterdam.

The Stelling van Amsterdam (Defence Line of Amsterdam – world heritage) and the Nieuwe Hollandse Waterlinie (New Dutch Water Line – tentative list to become world heritage), for instance, together formed the heart of Dutch defence in the 19th century [FIG. 1.11]. This heritage has a national dimension: it extends across dozens of kilometres, covers five provinces and passes through many municipalities. It is also a hybrid heritage, with many components: objects (locks, bridges, casemates, fortresses), structures (defence lines) and landscapes (inundation fields: the areas that could be covered with water to make the site inaccessible). And to really complicate matters: there are hundreds of owners and stakeholders, often with radically different aims and expectations. Ever since the invention of the aeroplane and heavy ammunition, the lines have become hopelessly outdated in respect of national defence. The challenge is to transform this heritage from the perspective of, and at the same time conserving, their cultural heritage value. Thus, the heritage status is not really in aid of mere conservation, but of controlled development, whereby the area, on the basis of its historical and spatial qualities, is supplied with new economic drivers, functional programmes and social relevance.

For the heritage sector to be successful in area-oriented assignments, a different attitude and approach is needed than was the case with mere conservation of protected objects.

FIG. 1.12 Heritage and development: Kruisherenhotel, Maastricht. Satijnplus Architecten, 2005.

Spatial planning and a development vision are urgently required, since conservation or musealisation of large areas and landscapes is really an illusion.

But how can the heritage sector achieve its ambition to conserve heritage, when the focus is shifting to spatial policy? Is it enough to describe the cultural heritage values of areas and take those values as the basis for a development framework? Or are, in addition, traditional instruments required, such as the designation and conservation of objects and elements? And should perhaps conditions also be laid down in respect of the spatial appearance and image quality of new entries, in order to provide areas with a new kind of coherence?

From conservation to development

A direct consequence of the many monuments and the large spatial scale of heritage, is that heritage care is more and more about the coordination of changes. The conservation of buildings is still high on the agenda, but right now the safeguard of heritage is taking place mainly in the domain of (spatial) developments. That shift took some getting used to for the heritage sector. Traditionally, heritage professionals have the (usually implicit) idea that developments are a threat to heritage – and not always without reason. But due to lack of subsidies, you often need private investments and new developments to finance heritage conservation [FIG. 1.12].

FIG. 1.13 Coolsingel Rotterdam with Schielandshuis, HBU Bank and Rotterdam Bank – three listed monuments in a historic setting, the Rotterdam-way.

Most developers are no longer the bullies who destroy the most beautiful places and who are only interested in making the largest possible profit. They know better now, because these days their customers often insist on a building with its own identity, in special neighbourhoods, with a unique story. Although restoration and adaptive re-use still involve additional costs when compared to (large scale) new developments, they produce added value in different ways, also money-wise.[17]

Development-oriented heritage care cannot do without the mutual trust between the heritage sector and the developers – despite the fears and prejudices from both sides in the past. This trust is based on the recognition of each other's interests – i.e. the link between entrepreneurship (making a profit) and heritage conservation. With this collaboration, the time of heritage care as a parallel, philanthropic reality is a thing of the past. How can the commercial interests of development be linked to heritage conservation, where financial compensation or support will often remain necessary? Which role should and can the government play when other parties take the lead?

From sectoral to integrated heritage care

Modern urban districts dating from the post-war period sometimes contain old monuments that have been left orphaned in the modern cityscape. Usually these are monuments that (often with much difficulty) were 'saved' from demolition, without any ambition to adapt the blueprint of renovation to their presence. The result is the existence of two quite isolated worlds, side by side, but without any spatial connection or functional relationship. Area-oriented heritage care is no longer focused on 'saving' relicts in otherwise indifferent developments. The aim is to work towards a living environment with a clear identity and spatial quality, where the old and the new will blend, and the success and uniqueness are a result of the interaction between conservation and renovation [FIG. 1.13].[18]

Integrated area development is a collaboration of parties with different backgrounds and interests. Within this collaboration, the heritage sector is not only committed to its own heritage interests, but is jointly responsible for the quality of the development as a whole. In that role, today's heritage care cannot always avoid 'getting its hands dirty', when giving up certain cultural heritage values can lead to better overall quality – and thus be of benefit to the heritage. This is sometimes called a gambit: to sacrifice a chess piece in order to win the game. However, it is not easy to make such sacrifices, when at the same time the stakeholders (in the private heritage field) only look at sectoral interests. How can the heritage world stand firm in the course of long-term, integrated development processes, and make the 'soft' heritage interest just as 'hard' as the interests of economy, environment and security? Can heritage be secured in a differentiated way, also partly dependent on circumstances and other interests? Is the ultimate aim of heritage care in area development to get its own way, or to achieve a collective success?

From matter to story

In the world of heritage, the term 'intangible heritage' is often used. How should this be approached by designers? The history of monument care shows that the idea of heritage and the way to deal with it has changed drastically over the years. There was a time when monuments were made more beautiful and 'more authentic' than they had ever been.

17 Sander Gelinck and Frank Strolenberg, *Rekenen op herbestemming, Idee, aanpak en cijfers van 25+1 gerealiseerde projecten,* Rotterdam 2014.

18 Ministry of Infrastructure and Environment (I&M), *Koersen op Karakter, Visie Erfgoed en Ruimte*, (Vision on Heritage and Spatial Policies), The Hague 2011.

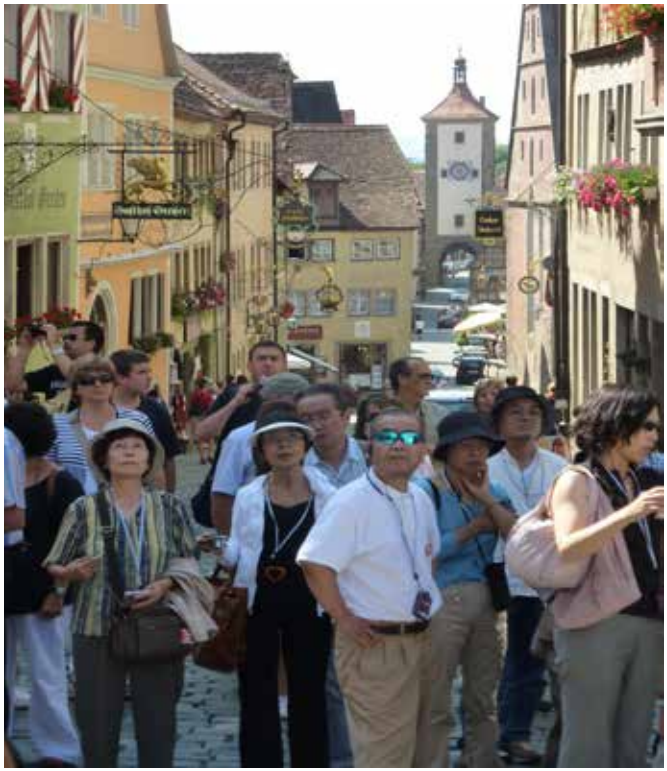


FIG. 1.14 Rothenburg ob der Tauber (Germany): historic city as destination of global tourism.

This was followed by a time when it was tried to conserve all that was left as well as possible.[19] However, in both cases it happened all too often that the vitality of a monument disappeared because of interventions which were in fact meant to save the monument. And what to make of the European historical cities? That is where the history of the continent is concentrated, but forty years ago they were often in a miserable state. Since then, much has changed for the better. Ruined monuments have been restored, car-free or low-traffic areas appeared, and dilapidated central zones emerged as the most expensive and popular locations. Recreation and tourism have become important economic drivers. But in the process the traditions, the mixed population, the crafts and the contrasts disappeared – and all those unique cities became the scene of more of the same: chain stores, catering concepts, living statues, museums of art, mini tourist trains and party bikes [FIG. 1.14]. In a way monument care, with all its expensive restorations of historic settings, contributed to processes of globalization and gentrification of the inner cities. This development underlines the fact that the conservation of buildings is not enough to ensure the conservation of a historic city – immaterial values like people, traditions and crafts are just as important.

Intangible heritage can also be related to the social importance of heritage. Take for example the protected garden towns of a hundred years ago. Architecture and urban design are important aspects of garden towns, but the uniqueness of this heritage lies most of all in the social architecture and the quality of life. Those aspects resulted directly from the philosophy of the idealists of that time: the social commitment of the architects (who had never before worked for the masses), the social work to provide decent housing for the working classes, the spatial concepts of the garden town or green suburb (E. Howard and F.L. Olmsted) and the political pioneers who, for the first time ever, regarded social care and public housing as a government task and tried to deal with it accordingly. Isn't it strange, when you look at associative values and social ideals, to rigidly stick to the original architecture – with all its endless repetition – when this is not in keeping with current conceptions of good living conditions?[20]

19 General principles for conservation, repair and extension of old buildings were defined in the Netherlands in: Nederlandsche Oudheidkundigen Bond, *Grondbeginselen en voorschriften voor het behoud, de herstelling en de uitbreiding van oude bouwwerken*, 1917.

20 Conservation plans in social housing neighbourhoods (like Jerusalem and Van der Pekbuurt, both in Amsterdam) tend to focus on restoration or reconstruction of the original buildings, rather than on the housing quality and the original target groups.

FIG. 1.15 Hotel New York, placemaker for (large scale) redevelopment of the Kop van Zuid, Rotterdam.

What exactly is being conserved when the social function (cheap housing) comes under pressure due to costly restorations, or when the original target groups (for example families with children – on which the entire outdoor area is based) can no longer be served?

From relicts to placemakers

In current urban redevelopment, connecting the old with the new is commonplace. That means that old buildings are sometimes changed considerably, but also that the renovation is (partly) based on the past, by means of for instance re-use of the spatial structure, the green areas, the materials, parts of buildings or the layout of the site. Saved monuments are no longer relicts of a world that has disappeared, but the quartermasters of the renovation. The heritage becomes placemaker. Hotel New York in Rotterdam has become a classic example of placemaking for area development [FIG. 1.15]. In the past, the Kop van Zuid area in Rotterdam was a busy port area with warehouses and the offices of the Holland America Line (HAL) – that transported emigrants to America. When port activities had disappeared, the area was redeveloped as an extension of the inner city. This took place in the nineties. At that time, the Kop van Zuid area was barely accessible. It could only be reached via a detour or per water taxi.

FIG. 1.16 Vacant heritage: Christus Koningkerk, Amsterdam. H.J. van Balen and K.P. Tholens, 1959.

Nevertheless, the restaurant that was established in the former offices of the HAL drew great crowds night after night. As a result, the area was a household name and a place-to-be in Rotterdam before the redevelopment had even started. In the case of Hotel New York, the hotel's contribution to the transformation of the area might have been a stroke of luck, but these days heritage and appealing functions are specifically applied to market an area. This often works well, because industrial heritage in particular is suitable for attractive high-profile (and hip) functions in the field of culture, creative industry and popular events. Moreover, the authentic atmosphere (luxury dining in a boiler house that looks like the stokers might walk in again at any moment) contributes to the identity and the story of the place – it is easy for people to experience a feeling and an emotion there, and to quite naturally make the area their own. The challenge is to maintain the atmosphere of pioneers and experiment for the longer term, or to adapt it to the gradual change of circumstances following the redevelopment. How can the 'brand' which is clearly defined by the authentic feel of the relicts, be credibly translated in the further development? Will there still be room for the pioneers when an area, partly due to their contribution, finds itself in a spiral of increasing value?

From redesign to programming

Now that the vacancy rate is a structural problem in the Netherlands, adaptive re-use has become a political priority. This often involves characteristic buildings and monuments, but also sometimes the junk heritage of office buildings dating from the eighties and nineties. Churches, monasteries, farms, factories, (monumental) offices, town halls – the list of often obsolete objects is long and covers millions of square meters [FIG. 1.16].[21]

21 Marinke Steenhuis and Paul Meurs, *Herbestemming in Nederland, nieuw gebruik van stad en land*, Rotterdam 2011.

FIG. 1.17 Campus Diemen-Zuid: transformation of Shell offices into a campus with 939 student houses. Dik Smeding Architecten, 2013.

It is remarkable that, particularly since the 2008 financial crisis, interventions less and less often lead to costly and major physical modifications [FIG. 1.17]. Adaptive re-use is in the first place a programmatic problem, i.e. to find functions or combinations of functions which are suitable for the vacant buildings. It could become exciting when 'unusual' combinations of functions result in unexpected forms of synergy. This can happen by sharing facilities like a porter, a canteen or conference rooms. Sometimes it goes one step further and new forms of collaboration emerge, for example between creative businesses and care facilities, or between childcare and an old people's home. Adaptive re-use requires more than just design talents from architects. High demands are being placed on all kinds of skills not traditionally associated with architects. Social competences, for example, are essential, because many people have a say in the planning processes and, moreover, often have different interests. Technical skills are becoming more and more important, because made to measure solutions are an important factor in many of the interventions, for instance in connection with sustainability requirements (installations and energy policies) or compliance with current building regulations. Recent adaptive re-use projects show that architects can also excel with a sound financial design, for example by taking maximum advantage of fiscal regulations and financing possibilities for heritage. How is the architect's training tailored for this new professional reality? How important is the architectonic design in the current practice of adaptive re-use?

FIG. 1.18 The intervention in De Hallen in Amsterdam was only possible with innovative financial constructions, partly designed by the architect. Architectenbureau J. van Stigt, 2014.

From assignment to initiative

In the old-style economy, an architect got an assignment when a development had more or less taken shape. Much was known about the programme (functions), the location (whether or not with existing buildings), exploitation and financing, as well as all the frames of reference of government (zoning plan) and developer (manageable risks). So the work for the architect was neatly defined, and he was free to concentrate on the design and the technical and structural detailing. In the new-style economy, concrete planning starts long before the exploitation is rounded off. The entire design and planning cycle sometimes seems to have been reversed. In general it is not a function for which a building must be found, but a building that requires a function. The initiative can come from many sides: from a potential user, the owner, an architect or a developer. Following this everything revolves around finding a programmatic arrangement and a financial construction, after which the design focuses on the necessary technical adjustments (sustainability) and on the interior [FIG. 1.18]. At the same time there is (sometimes) a need for an architectonic expression, particularly to take the old heritage into the present and to give it a modern feel. In these new processes, the architect must once again prove himself. What is his added value?

Heritage and design

The trends described in this chapter changed the role and position of the architect in relation to cultural heritage – and of other actors in this field. For part of the assignment, the role of the architect has become stronger. In heritage conservation, increasing importance is attached to adding architectonic value. The architect is strongly challenged to make a visible and prominent contribution to bringing the heritage back to life and putting it into (healthy) operation. Architecture can put heritage back on the map, as it were, and give it a right to exist. The numbers of visitors to the Rijksmuseum after the major renovation speak for themselves. However, for part of the assignment the contribution an architect can make is not clear. In the case of transformation and redevelopment, the design sometimes hardly matters anymore, because the development is focused on the initiative, the social arrangement (grouping of users), the programmatic design (co-existence and synergy), the technique (construction, installations and sustainability), finances (viability) and process design (get a grip on the complex regulations and the need for phasing).

FIG. 2.1 Lentos Kunstmuseum, Linz (Austria). Weber and Hofer Architects, 2003.

2 – Design and cultural value

During most of the twentieth century, the basic principles for interventions on monuments were quite straightforward. Generations of architects learnt that it was taboo to build replicas, to reconstruct old building fragments or earlier building phases without scientific substantiation, or to tear down monuments without having documented them properly. New additions had to remain recognisable, for example by designing them in a modern architectural style. This was in line with the idea that in Europe a new era had begun, which meant a departure from the past and its traditions.

As a result, lots of concrete, glass and steel were used in additions and extensions to old monuments, irrespective of whether or not this fitted in with the atmosphere and the character of the place [FIG. 2.1]. In practice, of course, these basic principles were not always taken seriously, and often for good reasons. Torn down gables in Amsterdam were given a new place in the inner city even before the Second World War (Van Houtenpanden).[22]

When old buildings were demolished, the façades were sometimes saved to be used in the new development. As a matter of fact, this is still happening. The desire to reconstruct monuments destroyed by fire is also of all times: Leiden Town Hall (1929-1940), Doornenburg Castle (1945-1966) and dozens of burnt down windmills and church spires were rebuilt [FIG. 2.2–2.3].[23]

22 Vincent van Rossem, 'Moderne architectuur in de schaduw van het modernisme', Bulletin KNOB, 107 (2008) 4, 138-146.

23 Paul Meurs, *De moderne historische stad, ontwerpen voor vernieuwing en behoud 1883-1940*, Rotterdam 2000, 415-425 (townhall Leiden); J.A.C. Tillema, *Schetsen uit de geschiedenis van de Monumentenzorg in Nederland,* The Hague 1975, 164-166 (castle Doornenburg).

FIG. 2.2 Windmill 'De Adriaan', Haarlem. Destroyed by fire in 1932, rebuilt in 2002.

In 2014, the Dutch parliament discussed whether or not it was justified to remove the burnt down and subsequently reconstructed windmill Windlust in the village of Burum from the monument register, and unanimously concluded that the replica merited national monument status.[24]

Opinions on all these examples of reconstructions may differ. Is it pseudo history, a false façade, conservation of size, scale and historical differentiation, or recovery of the urban landscape?

Or is there not one absolute truth, and does the intervention decided upon depend on the spirit of the time, context, principal and architect?

In recent decades, the pluralist approach has gained ground. Judging by projects for restoration, adaptive re-use or transformation of heritage over the past twenty years, an awful lot of things can be done with monuments these days, varying from detailed conservation to complete reconstruction, partial demolition or radical change, all with the consent of the heritage authorities.[24] In other words, there is no standard solution for a good intervention on a monument.[25]

24 The liberal party (VVD) proposed the governement to keep the reconstructed windmill listed, against the advice of the National Heritage Agency. The plea got support from all parties in parliament.

25 Paul Meurs, 'Restoration without dogma, guidelines, from general to specific', in: Paul Meurs, *Building in the Stubborn City,* Delft 2008, 53-89.

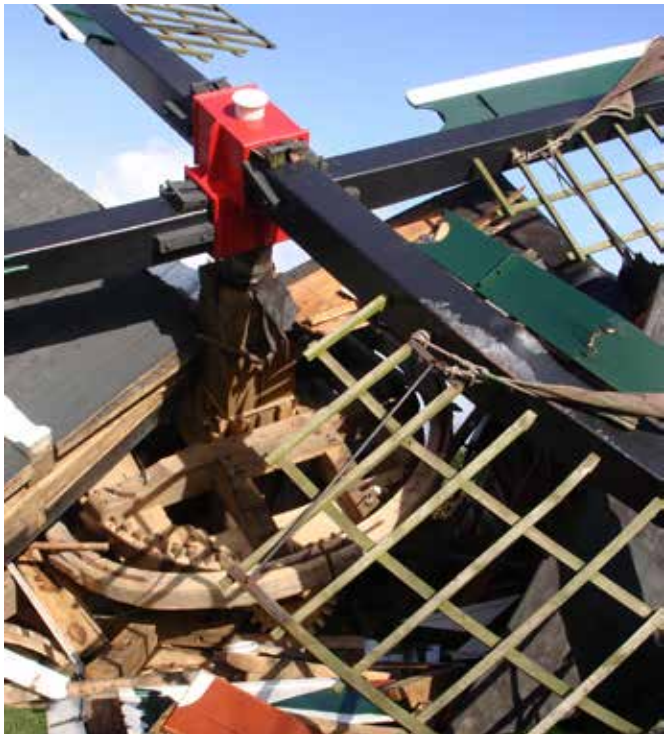


FIG. 2.3 Windmill 'Zeldenrust', Geffen. Demolished by the storm Kyrill in 2007 and rebuilt afterwards.

The challenge is to find the optimal intervention for each separate case. This allows for only one approach, which is to take the existing qualities of the object or the site as the starting point for the new development. This sounds obvious, but it certainly requires a specific approach to design. The design is no longer inspired by the future function, or by the artistic intuition of the designer: 'I can see a cupola here', 'we should do something with colour' or 'let's create a contrast'. These days it is based on the cultural value, the social reality and the 'mentality of the place'.

Partly due to pressure from residents and other stakeholders, cultural history has become an issue in spatial developments. This applies to the design of new buildings in the existing city as well as to the transformation of existing buildings. That makes sense when an intervention in heritage is concerned – because on the location in question you will of course always be reminded of the past. But how can a monument be adapted to requirements related to new functions, modern techniques, sustainability or changed heritage policies? In the case of new buildings in the existing city (expansion, demolition-new construction, redevelopment), the link with cultural history is not always a logical one, but in general there is a wish to adapt new developments to the context, the characteristics and the atmosphere of a place. So the architecture of a hotel in an inner city will differ from the architecture of a hotel in a suburb, even though the design brief is similar. But exactly which building characteristics reflect this difference? To make a design which is sensitive to the existing qualities and the logic of a place, it is necessary to understand the site, visualise it and interpret it. The challenge is to do this in design language. For the design of an addition in or to a monument, a detailed list of ornaments and stylistic elements is not much use to a designer, nor is the observation that a building is important in the oeuvre of a particular architect.

The focus should be on the possibilities and impossibilities for the future of a monument. This means that the narrative of the cultural history (the story of the place) must be translated to spatial terms and design themes. The analysis of the heritage becomes relevant for a design assignment once the idea behind the monument, or the reason why a project is exceptional within an oeuvre, is clear. A designer can take it from there, or relate to it in his own way; because even monuments are not static.

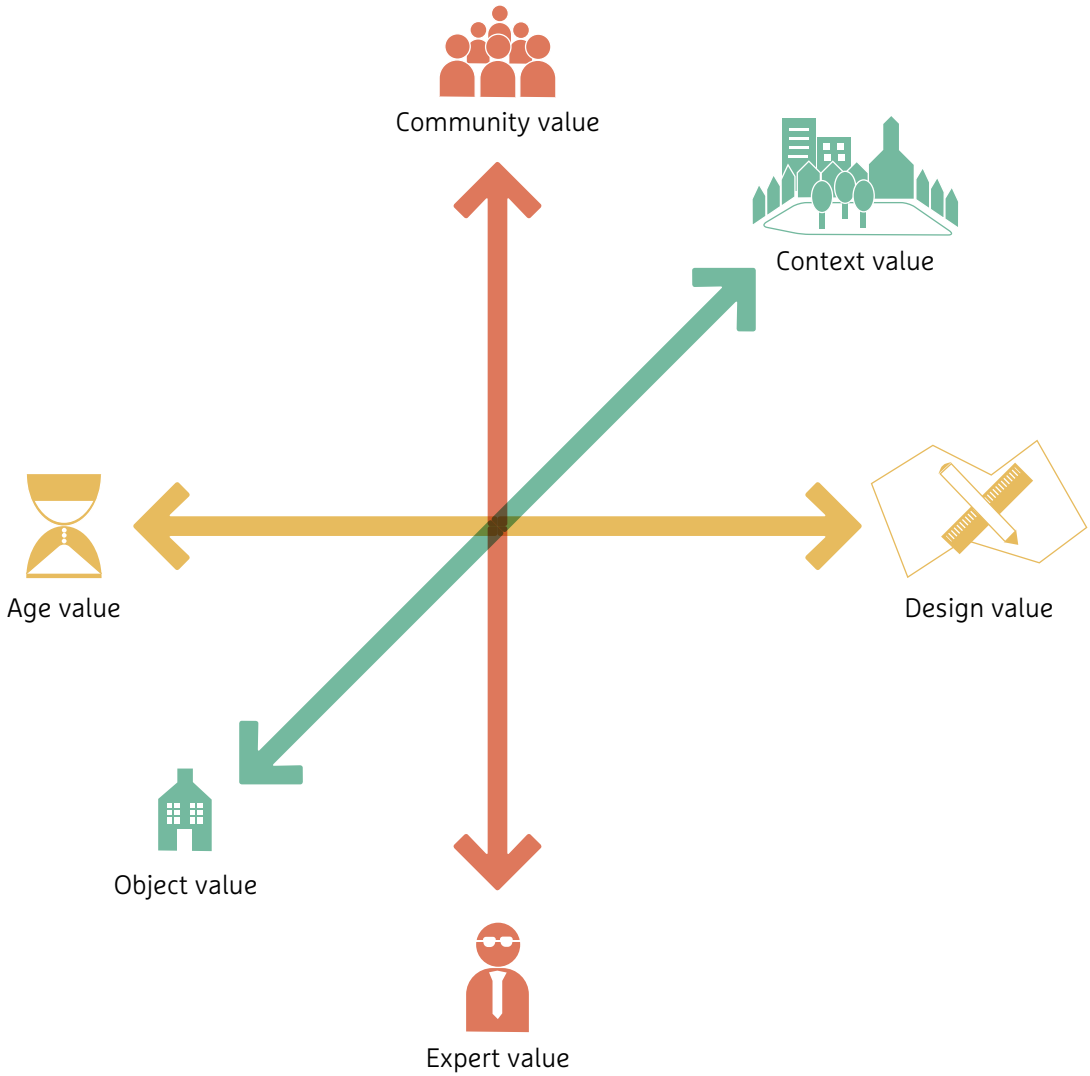


FIG. 2.4 The dimensions of cultural value. (SteenhuisMeurs).

FIG. 2.5 Brasília (Brazil), a world heritage city. Only a few buildings are listed monuments.

2.1 – Cultural heritage value as a multiple concept

The history of heritage care shows that heritage values have changed over the years. Each generation places the emphasis on slightly different aspects. These days, the experience of heritage is important. Much attention is paid to social aspects, such as the heritage of 'ordinary people' and personal stories told about a building or a location. How were people housed? What kind of people were they? What was life like back then, and what does that teach us about society in those days? Monuments and historic places can be read and interpreted in different ways. Depending upon the perspective from which it is viewed, the cultural heritage value will be interpreted differently [FIG. 2.4]. This does not mean that this value is subjective, but it does mean that it has multiple dimensions, and that it is not always easy to determine which line of approach should prevali [FIG. 2.5].

Below, three pairs of values are described: *age value versus design value*, *expert value versus community value* and *object value versus context value*. Case by case, one or the other value will carry more weight. Subsequently, a number of different heritage approaches on different continents will be introduced.

FIG. 2.6 Age value: ruins of Castle Brederode, Santpoort-Zuid.

The dilemma of authenticity: age value versus design value

The oldest and most obvious expression of cultural heritage value is the physical presence of the heritage: the substance of which a monument is built up [FIG. 2.6]. The physical object is the 'carrier' of the historical meaning. It is of course possible that the object has changed in the course of time. Each intervention (renovation, restoration or transformation) adds a new 'layer' of history to the building. Positive about this is that it enriches the object – it reflects the traces of life (of sometimes many generations).
A negative aspect might be that the special significance of the old relict is reduced as a result of the transformations – because: the more interventions take place, the bigger the risk that less will remain of the earlier building phases. The more unspoilt a monument has remained, the more its age and (material) authenticity can be felt. A hundred years ago, the Austrian conservationalist Alois Riegl already spoke of 'Älterswart' – age value – which manifested itself, for example, in the patina (the traces of time).[26] Monuments can have different meanings that are linked directly to the historical building substance: as a relict which reminds us of the past, as an outstanding work of art or craftwork, and as a historical source. In the unspoilt monument, the hand of the maker can still be recognised; this is a quality that cannot be reproduced (at best suggested). As a historical source, a monument can be investigated and reveal its secrets. It is possible that at some time in the future, with the use of new techniques or methods, a new interpretation of the past can be fabricated. Therefore it is important for us to make sure that future specialists, too, are given the opportunity to investigate the authentic object! That is why in case of restorations it might be appropriate to safeguard the monument as an 'archive' for the future. Recent cases of destruction in ancient cities like Timbuktu and Palmyra not only mean that age old monuments have disappeared, but also that important historical sources have been lost forever.

26 A. Riegl, *Der moderne Denkmalkultus, Sein Wesen und seine Entstehung*, Vienna and Leipzig 1903.

FIG. 2.7 Design value: Barcelona-pavillion (Spain), reconstruction Ignaci de Solà-Morales, Cristian Cirici and Fernando Ramos (1986).

As early as the nineteenth century, the Englishman John Ruskin called for restraint regarding the conservation of monuments.[27] He wanted to avoid the risk of monuments falling victim to the enthusiasm of conservators unable to put a timely stop to their interventions and interpretations. Reasoning from the perspective of age value, restraint is the issue. The design attitude that regards the age value as a top priority is an attitude of holding back. It is quite literally a question of leaving things alone.[28] Repairs and replacement of parts which are broken down or affected by rot, and putting right structural defects, will sometimes be inevitable, but the question is how far this should go.

In the previous century, restoration of a building often went hand-in-hand with tearing down the interior (frames, panelling, wallpaper, paint layers, ceilings) – followed by reconstruction or a free reinterpretation. As a consequence, in the case of pre-1850 monuments, more often than we would like we are actually looking at twentieth century interpretations.

The counterpart of the age value is the design value – whereby the essence of the monument does not lie in the material which has stood the test of time, but in the underlying spatial or typological concept [FIG. 2.7]. As a result of subsequent changes, it happens all too often that the 'original' or 'authentic' concept has become watered down or unrecognisable. When carrying out a restoration, this can be a reason to deal with a monument quite thoroughly by stripping it of the later additions and reconstructing missing parts – with the aim of being able to once again experience the quality of the concept as a whole. However, a consequence of this approach is that time can no longer do its work. In a certain sense, the monument becomes timeless and stays forever young, like Peter Pan. During restorations in the late nineteenth century, it was common practice to radically reconstruct monuments, whether or not there was (scientific) proof of what exactly the monument had looked like in the past. The French architect Viollet-le-Duc recreated complete cities in accordance with his (artistic) interpretation of the Middle Ages (like in Carcassonne). In the Netherlands this method was applied by P.J.H. Cuypers. His restorations are recognisable as authentic Cuypers interventions, such as the restoration/reconstruction of De Haar Castle near Haarzuilens, and numerous gothic churches. [29] The creative interpretation of heritage was criticised at the time because it led to old monuments being replaced, as it were, by new retro buildings. As a result, the 1917 Principles and regulations regarding the conservation, the restoration and the extension of old buildings were drawn up in the Netherlands, to discourage reconstructions.[30]

27 John Ruskin, *The Seven Lamps of Architecture*, 1847.

28 Paul Meurs, *Architectuur en het nalaten*, Utrecht 1993, 73.

29 Nederlandsche Oudheidkundigen Bond, *Grondbeginselen en voorschriften voor het behoud, de herstelling en de uitbreiding van oude bouwwerken*, 1917.

30 Wies van Leeuwen, *De maakbaarheid van het verleden, P.J.H. Cuypers als restauratie-architect*, Zwolle 1995.

FIG. 2.8 Sanatorium Zonnestraal, Hilversum. Restoration-reconstruction Wessel de Jonge Architecten, 2008.

After the Second World War, with its large-scale destruction, there was a strong wish to repair the damaged cities.[31] All over Europe, inner cities and outstanding monuments were reconstructed, in which connection pre-war measurement records and drawings proved to be of great value [FIG. 2.8–2.9]. The need to justify interventions and have them meet certain general principles led to the establishment of the 1964 International Restoration Charter, which became known as the Venice Charter and which has had a large impact on monument care all over the world.[32] The charter advocated a scientific and conservative approach to restorations, and called for additions and changes to be kept recognisable.

31 Winfried Nerdinger (ed.), *Geschichte der Rekonstruktion, Rekonstruktion der Geschichte*, Munich 2010, 36-47; Sara Stroux, '"Kein Ästhetisches Heil ausse im Alterswert", over het actuele Duitse reconstructiedebat', KNOB 114 (2015) 2, 84-101.

32 'Venice Charter on Conservation and Restoration', adopted at the Second International Congress of Architects and Technicians of Historic Monuments, Venice 1964.

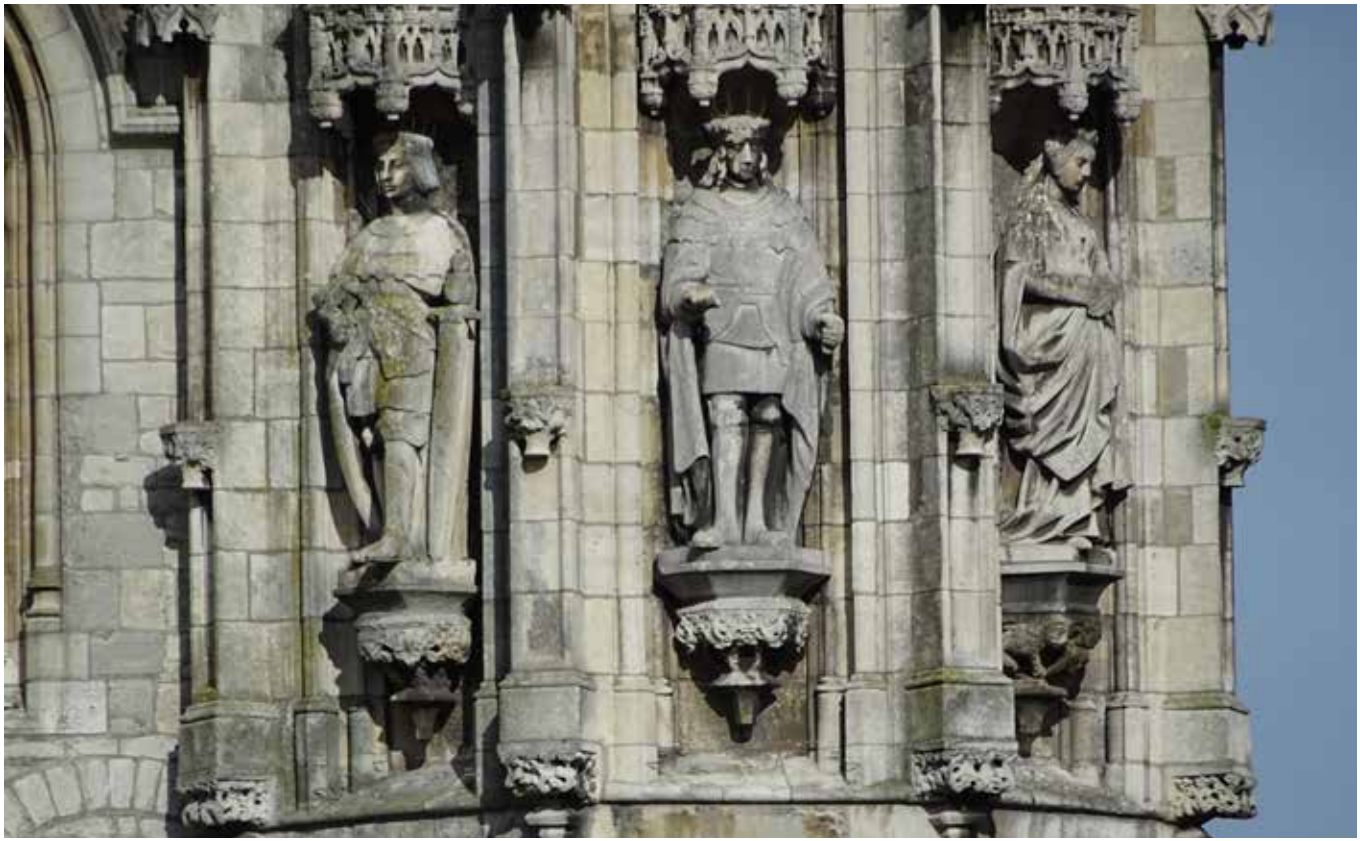


FIG. 2.9 Townhall, Middelburg. Restoration-reconstruction: H. van Heeswijk and M.J.J. van Beveren, 1950.

Since then, much has changed in our perception of monuments and in the restoration process, and so the clear-cut solutions laid down in the charter are no longer always relevant in concrete cases. Nowadays, there is a need for customisation. The current emphasis on the immaterial aspects of heritage and on the experience (the suggestion of authenticity) provides greater freedom to address the material aspects of heritage. Thus, in certain circumstances there might well be a case for new development of (disappeared or never built) monuments.

FIG. 2.10 Housing complex De Kiefhoek, reconstructed by Wytze Patijn, 1995. Research SteenhuisMeurs, 2013.

Monuments of the Modern Movement illustrate how our idea of authenticity has changed. Take reconstructions such as Café De Unie and residential area Kiefhoek in Rotterdam [FIG. 2.10], designed by J.J.P. Oud, or the Mies van der Rohe pavilion in Barcelona [FIG. 2.7]. Two replicas were in fact made of the works office building at the Witte Dorp housing project in Rotterdam. This building was designed by architect Oud and had disappeared long before the Second World War. One replica is located nearby the demolished residential area and the other in the town of Sassenheim, on the site of a paint factory. The main point of these reconstructions is the iconic image, the spatial perception, the typology and the materialisation. The authentic material and the patina matter less. Reconstructions of modern architecture are often based on very detailed information in respect of the design and the development, in the form of building specifications, correspondence, working drawings and photographs. Moreover, old building materials can often be found, or are commercially available even now. With the possibility of new development of monuments or old designs, the boundary between 'real' and 'fake' is blurred.

FIG. 2.11 Age-value and modern movement: Narkomfim building, Moscow (Russia), Moisel Ginsburg and Ignaty Milinis, 1932. [FIG. 2.11–2.12]

FIG. 2.12

As more modern monuments are restored to their condition at the time of initial completion, however, it becomes more difficult to experience the depth of time and the age of the Modern Movement. Aged modern architecture, with its patina, wear or outdated high tech is becoming increasingly rare and is gaining in age value by the day, in spite of the importance of the subject and the spatial concept. How is it possible that modern architecture can look so old and dated [FIG. 2.11–2.12]?

FIG. 2.13 Expert-value: Lighthouse cinema (now confection store), Kalkata (India), W.M. Dudok, 1934, seen as part of an important oeuvre.

The dilemma of assessment: expert value versus community value

Whereas the object value and the design value are related to the question of how to look at a monument, the expert value and the community value are indicators for who is looking at it. We are used to the cultural heritage value being determined by someone who has studied the subject, often an architecture historian or a building archaeologist. Such an expert will look at many aspects of a monument. How unique is an object or an area for the Netherlands, or even on an international scale? Was it at some point ground-breaking or controversial? Is it (or has it become) rare, and to what extent does it fit in with the highlights of the national collection? Experts place heritage in an architectural and cultural context. They make collections and data sets, and look for relationships and long lines.

This results in fascinating stories about the development of architecture and the often unique circumstances which have led to outstanding monuments. The experts are fond of buildings that at the time of their construction were mentioned in the professional journals or were designed by famous architects such as Berlage or Dudok [FIG. 2.13]. A villa will quite easily be labelled as a 'genuine' Van den Broek en Bakema – even though it might well have been conceived by a trainee. The drawback of expert assessment (sometimes) is that residents, owners or other stakeholders do not recognise the unique value, or lack an adequate frame of reference. As a result, the monument status granted to their house or property is a complete surprise for them: 'What do you mean special?' or: 'a good story, but we still think the project is a failure, ugly and outdated.'

FIG. 2.14 Community value: reconstructed fortress of Bourtange.

On the other hand, buildings that mean nothing to the experts can be regarded locally as essential monuments [FIG. 2.14]. Take the Laurentius Church in Weesp – a watered-down version of a nineteenth century neo-Gothic church, third-rate for the expert. But that is not the view of the citizens of Weesp: it is their church, their townscape, their 'lieux de mémoire' (anchorage for memory). The church is no longer in use, it is suffering from severe subsidence, and it is classified as a mere municipal monument, which makes it difficult to get access to the knowledge and means required for conservation. The community value is closely linked to the personal perception and memory of people and their community. Apart from the icons that typify the appearance of a neighbourhood, village or district, a high community value is often represented by objects related to social life, like community centres or schools. Together with residents it can often be determined which places and buildings are of local importance, and how these might be included in new developments.

FIG. 2.15 Context value: Hotel Centraal Rotterdam, a fragment of the old city center that survived the war.

The dilemma of scale: object value and context value

The third pair of values focuses on the scale we are looking at. The object value is in line with the tradition of monument care, whereby monuments are assessed and appreciated mainly on the basis of the meanings they encompass: architecture, typology, historical events, etc. The context value is more specific to area-oriented heritage care, with the value of the object linked above all to its meaning as a building block of a larger whole: a cityscape or a cultural landscape. Objects of little relevance as such can represent crucial links in a cityscape – because they mark a transition, are iconic, show rare traces of a certain historical period (like pre-war buildings in the centre of Rotterdam) or provide the public domain with size, scale and a historic character [FIG. 2.15]. In the Netherlands, objects unlikely to qualify for monument status but nevertheless essential in their environment, can be protected through zoning plans (and in the future via integrated spatial and environmental plans). This makes it more difficult to tear down these objects, and allows for stricter monitoring of the architectonic quality of transformations. In general this concerns the façade, as a determining factor in the public domain.

The difference between object value and context value is manifest in cases of new developments in a historical city or within an ensemble. If you read an inner city like a series of separate objects and you were to realise new buildings in a gap in a street line, you could choose a kind of architecture

FIG. 2.16 Object value: Tower of London (England), world heritage, dwarfed by high-rise buildlings of The City.

that disregards its environment – a contemporary gem. However, if you read the same situation like a historically grown urban whole, you will discover that such a city has its own logic, which has to do with material, scale, form and composition – but also with a hierarchy of the building blocks [FIG. 2.16]. Public buildings, for example, are emphasised in the way they are positioned in the public domain and in their architecture, while ordinary housing projects are often mere 'water carriers' of the cityscape. There are interesting studies on the rules of play by which architecture – for example by Camillo Sitte (1889), Kevin Lynch (1960) or Gorden Cullen (1961) – is embedded in the cityscape.[33] On the basis of an understanding of the spatial context, an architect can build on this in his own way. He may choose a historicising kind of architecture, possibly with a modern twist. Another option is to make his own interpretation of that context, and to transform or adapt it. This can result in a design which at first sight blends in with the historic picture (for example in respect of size, form, colour and materials), but which on reflection is distinguished by, for example, the composition, the details, or material processing. The result links tradition and history with the present.

33 Camillo Sitte, *De Stedenbouw volgens mijn artistieke grondbeginselen,* Rotterdam 1991 (first published as: Der Städtebau nach seinen künstlerischen Grundsätzen, Vienna 1889), Gorden Cullen, *Townscape,* London 1961; Kevin Lynch, *The image of the City*, Cambridge MA 1960.

FIG. 2.17 Presidential palace, Quito (Ecuador).

2.2 – Cultural heritage value for different cultures

Cultural heritage value varies through time – each generation applies its own emphasis. The value also varies from one culture to another. In an international context, significant differences can be seen in the views on heritage and, following from that, in the way it is preserved or developed.

In South America, 'eurocentrism' in the heritage world – the one-sided approach to heritage as historical substance – is sometimes critically discussed.[34] As a result of the desire to preserve and restore the substance, other essential qualities are often lost.

34 Ramon Gutierrez, 'Historiografía de la arquitectura americana y preservación del patrimonio', *Patrimonia, la historia en la conservación del Patrimonio Edificado*, Quito (Ecuador), September 2010.

FIG. 2.18 Traditional craftmanship from Djenne (Mali), exposed in Delft, 2007.

Take the old historic inner cities in Europe: they have been beautifully restored, but are uniform in character due to the one-sided interpretation that came with costly restoration campaigns. Everywhere you will find the same chain stores, world brands and tourist facilities – but the life and culture that gave these cities their unique qualities have disappeared or were driven away to other places in the city as a result of value increase. At best, the history is staged as a performance by actors. An important objective of South American heritage policy is to hold on to residents and maintain the social structure linked to the continuation of traditions, customs, crafts and traditional occupations [FIG. 2.17]. A consequence of this could be that heritage care is no longer primarily focused on high-quality restorations, but on guaranteeing continuity by means of maintenance and small interventions, by supporting local communities and by stimulating the local economy based on the existing social structure.

The world monuments in Mali, for example in the city of Djenné, are built of clay. In the rainy season, part of them is swept away by rain water. Every year, since time immemorial, the buildings are daubed again with clay, in the course of which the craftsmen (the masons) reproduce and transform ornaments and façade decorations [FIG. 2.18]. The buildings are ancient and brand-new at the same time. The European idea of an authentic historical form does not apply in Mali.[35] The monuments change their shape every time maintenance is performed. The constant is not the form set in time, but the living tradition of craftsmanship and the handed down repertoire of forms, techniques and decorative patterns used in the maintenance of the buildings. Partly as a result of the internationalisation of heritage care, disagreements have arisen on how to manage this heritage. The restoration of the Great Mosque of Djenné is a typical example in this connection. Traditionally, every year a ritual festival is organised for the maintenance of the mosque. People from all over the city are involved. They come to the mosque, build wooden stands and daub all the walls. Influenced by this tradition, the shape of the mosque has changed through the years. Because tall palm wood scaffolding poles are no longer available, many more wooden logs have to be used to secure the scaffolding to the façades.

35 Pierre Maas, *De architectuur van Djenné, een onderzoek naar de historische stad (The architecture of Djenné, a study of the historical city)*, Eindhoven 1994.

FIG. 2.19 Ise Jingu Shrine (Japan).

Recently, a major restoration took place, with international aid and financing. Based on historical research, the 'authentic shape' was determined and restored. The annual ritual daubing was prohibited – which provoked great anger amongst the community. These days, the tradition has been reinstated, but the question remains as to what exactly constitutes the unique universal value of this monument: a certain shape set in time, or the living tradition of the ancient craft of masonry?

Cultures in the Far East, like those in Africa, attach less weight to the age value of monuments than we do in Europe [FIG. 2.19]. The ritual tearing down and rebuilding of the Ise-Jingu Shrine in Japan is a perfect illustration in this connection.

The shrine is 1300 years old, but over that period of time it has been torn down and rebuilt every 20 years.[36] Patina and age do not affect the monument; what really counts is the living tradition of renewal. Just like in Mali, the authenticity lies in the ritual of tearing down and rebuilding, and consequently in the traditional techniques and the mastery of the craftsmen who give it shape. Each generation gets the chance to acquire an understanding of the ancient heritage.

36 Niels Gutschow, 'Wiederaufbau, Neubau und Rekonstruktion in Asien. Zur Kontinuität von Objekt und Ritual in Nepal, Indien und Japan', Winfried Nerdinger (ed.), *Geschichte der Rekonstruktion, Rekonstruktion der Geschichte*, Munich 2010, 36-47.

2.3 – The value assessment

To be able to design an intervention in a monument or a historic ensemble, it is useful to determine the cultural heritage value in advance, so that all parties know where they stand. In jargon this is called a value assessment. The designer can draw inspiration and information from the value assessment, determine his own position on the basis thereof, and work out how this relates to the meaning of the cultural heritage of the location. For the heritage organisations, the Committee for Building Aesthetics and Heritage and other plan assessors, the value assessment is the reference and the framework for judging a design. For residents and other stakeholders, the value asessment can be used to identify and understand what is meant by cultural heritage value. Ideally, they will also be actively involved in the process of valuation and will be allowed to contribute their knowledge and experience. Once all the parties involved agree on the essential cultural heritage values as recorded in the value assessment, this will form the basis for the discussion on the impact of interventions on monuments. With the value assessment at hand, it will be instantly clear whether or not a monument will survive a proposed intervention.

Drawing up a cultural heritage analysis and a value assessment requires specialist know-how, with a historical and spatial analysis as a basis. Some architects specialise in drawing up value assessments, often in cooperation with architectural historians. When architects make the value assessment and the transformation design as well, confusion will arise as to their role. This is because the impression is easily created that the cultural heritage value assessment is not a 'neutral' framework, but is tailored to the design. A classic (beginners) mistake is to incorporate or justify the design in the cultural heritage value assessment. To provide clarity regarding the roles, it is more logical for the value assessment not to be drawn up by the designer, but to be the product of independent research.

In the Netherlands, value assessments come in many shapes and sizes. They do not always serve the same purpose, are set up differently, and the depth and scope also differ from one research to another.

For example, value assessments can be found in *substantiating descriptions of monuments*, *building archaeological research* and *cultural heritage analysis*.

Substantiating descriptions of monuments

The monument register provides (on line) information on all national monuments. This concerns practical data, but also a description explaining why something is a monument – hence the term: substantiating description. In the old days, such a description was very brief ('building with frame gable'), but nowadays it is often a multi-page document, which describes the building history and the usage history, resulting in the conclusion as to what exactly represents the monumental value. A substantiating description is also available for municipal and provincial monuments. It is primarily a legal document, suitable for use by the judiciary to arrive at a judgment in case of any dispute. The document is also useful for architects, because it summarises the outstanding qualities of the monument. This takes place according to a system; the values are sub-divided into urban development value, architectonic value, cultural heritage value, rarity value and integrity (authenticity), in the case of municipal monuments sometimes supplemented by experiential value or local relevance. What is often lacking in the substantiating description is the 'translation' of the story to the building and the spatial logic of the place. That is why it is often difficult for a designer to decide on the basis of a textual description what may or may not be done to a monument. Usually there is nothing to be found in the document about the (im)possibilities of additions or transformations – because it serves a different purpose.

Cultural value

Hegius lyceum, Deventer

Building envelope

- High value
  Maintain architectural quality in frontage, side facade, mass volume and roof
- Positive value
  Space for transformation while maintaining the architectural relation, the new should fit in the total image

Spacial structure

- High value
  Maintain the spatial structure and experience in the hallways and the entrances
  Maintain the monumental value (art and finishing)
- Positive value
  Space for transformation while continuing the spacial qualities

GROUND FLOOR

1 2 3 4 5 10 15M

N

FIG. 2.20 Value assessment drawing Hegius lyceum, Deventer. W.P.C. Knuttel, 1954.

Building archaeological research

In some municipalities an (independent) building archaeological or cultural heritage survey is required to accompany an intervention plan for a monument or a site. Such a survey becomes part of the planning. Building archaeological research focuses on figuring out in detail the building and transformation history and the usage history of a building, with the archives and the object itself as the key sources. Like a detective, the building archaeologist follows the traces back in time, to eventually come to an interpretation of all the building phases and traces of construction in the building.
This research is concluded with a drawing accompanied by an explanatory text, which together form the value assessment. By means of colour codes, the value assessment drawings show a high monument value (blue), monument value (green) or indifferent value (yellow) in respect of all the walls, partitions, floors and ceilings [FIG. 2.20].

Building archaeological research provides an architect with a great deal of information on a building and its physical condition. The age value is indicated very accurately, per building element, so you know which parts of a building are important as a historical source. The other values – particularly the design value, the community value and the context value – are quite often underappreciated. Building archaeological research is not aimed directly at giving an architect input on how an intervention can take shape. He will learn from it mainly which parts he should not touch. In that sense it is a 'defensive' document, focused on the existing material value. For building archaeological research carried out in respect of buildings, the 2009 Guidelines for Building Archaeological Research, to be found on line, can be consulted.[37]

Cultural heritage analysis

For a cultural heritage analysis a building or an area is researched from the perspective of both its material and its immaterial and associative relevance. This type of research is also used as an assessment framework – but goes beyond the material reality of the age value alone. The emphasis is on the urban planning and cultural context from which the monument originated, i.e. the history of ideas. Apart from the building itself, it is also about underlying philosophies, associative values and intentions, whether realised or not. The soul of the monument is exposed. The conclusions of cultural heritage research will identify and prioritise the different dimensions of the cultural value. This will not only produce values to be preserved, but also themes for further or new developments. These can be added to the analysis in the form of recommendations.

37 RCE, SBN, VNG, ARB and RGD, 'Richtlijnen Bouwhistorisch Onderzoek, lezen en analyseren van cultuurhistorisch erfgoed', The Hague 2009.

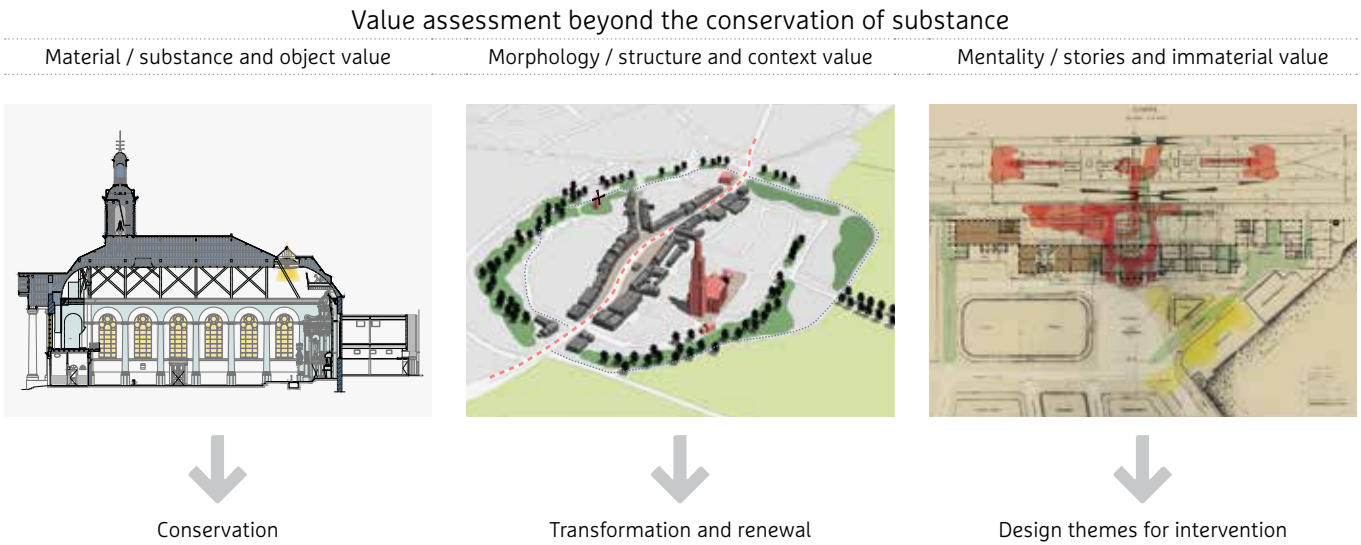


FIG. 2.21 Value assessment beyond the conservation of substance. (SteenhuisMeurs).

2.4 – Architect and cultural value

In the research phase of the design, the challenge for the designer is to identify and structure the cultural heritage values – and to translate these into basic principles for the intervention. This is a question of assembling and arranging – but also of converting stories to spatial terms. Many sources are available, such as the monument dossier, existing building archaeological or cultural heritage assessments, and of course the location itself. As a designer, you yourself will have to carry out a thorough investigation and analysis of a building or a location, so as to be able to translate the descriptions and value judgments to spatial principles. The first question is what constitutes the essence of the monument. Only after that has been determined, the next question can be addressed: in what way can this value be included in the design, and what does this mean for the architecture of an intervention or a transformation? Following that, the challenge of creative synthesis becomes the focal point.

For defining the essential qualities, the office for cultural heritage research SteenhuisMeurs developed a method aimed at future transformations [FIG. 2.21].[38]
This method addresses three aspects: valuable substance (material), valuable structures (morphology) and valuable stories (mentality, building culture, symbolic value) .
These can be grouped in the form of a set of core values, and be developed into an agenda for conservation and intervention [FIG. 2.22].

38 Urban Fabric / Steenhuis stedenbouw/landschap (SteenhuisMeurs), *Strijp R Eindhoven, cultuurhistorische verkenning*, Schiedam 2007, 7 (The Color of Strijp-R, the Culture of Strijp-R, The Memory of Strijp-R);
Urban Fabric / Steenhuis stedenbouw/landschap (SteenhuisMeurs), *Van der Pekbuurt Amsterdam, cultuurhistorische verkenning,* Schiedam 2009, 67-79 (immaterial quality – Van der Pekbuurt in six faces; urban quality, structure and ensembles; architectual quality, the exemplary types).

FIG. 2.22 Officers houses at Fort Zeelandia, Paramaribo (Surinam): substance + structure + stories.

Material essence

Administratiekantoor Gemeentetram Amsterdam

Categories	High monumental value	Positive monumental value	Indifferent monumental value
Elements	Interior aspects	Interior aspects: flooring	

GROUND FLOOR

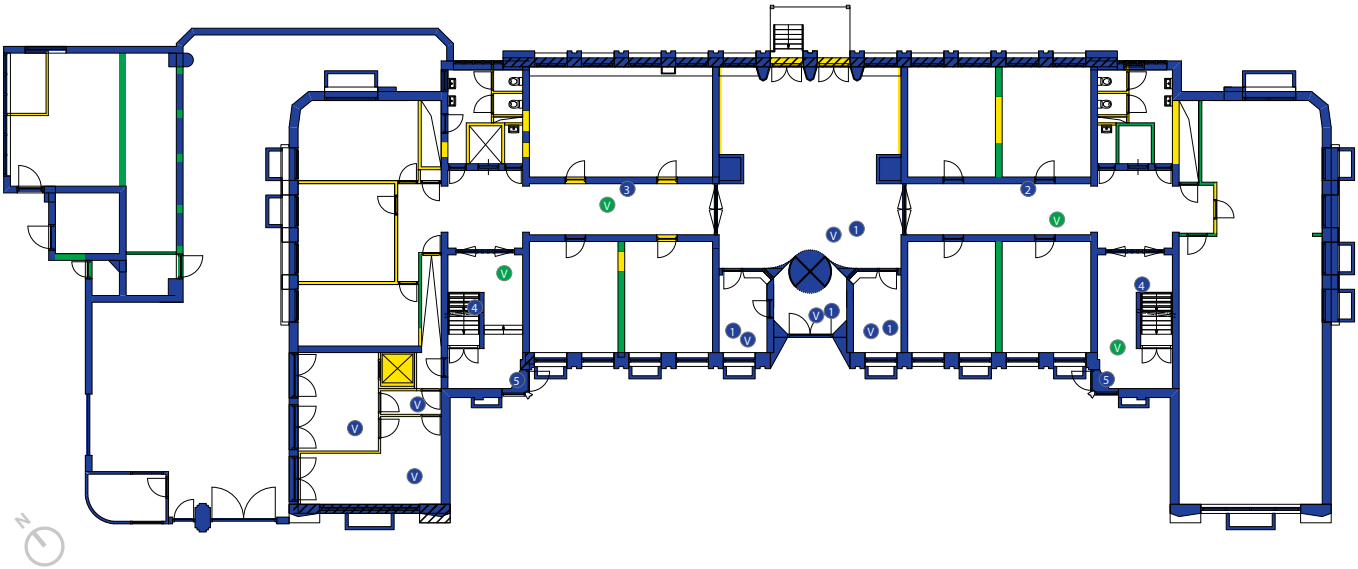


FIG. 2.23 Material essence: Administratiekantoor Gemeentetram Amsterdam, Pieter Lucas Marnette (Publieke Werken Amsterdam), 1923. Ground floor. Research SteenhuisMeurs, 2012.

A. The material essence of the object: material and substance

Every valuable and irreplaceable aspect of a monument or a site (ensemble, city or landscape) is part of the material essence [FIG. 2.23]. In this respect, age and uniqueness prevail: the expert craftsmanship or the artistic quality of buildings, building parts and outdoor spaces, the age and the patina (including monumental trees and landscape elements).

In principle, everything that can be classified as essential in its physical appearance requires conservation. These essences should, if at all possible, be cherished and included in the design for changes. This poses a heavy burden on the usage possibilities. For the majority of protected monuments it is not desirable, nor is it necessary, to qualify every historical fragment as substance of high monument value.

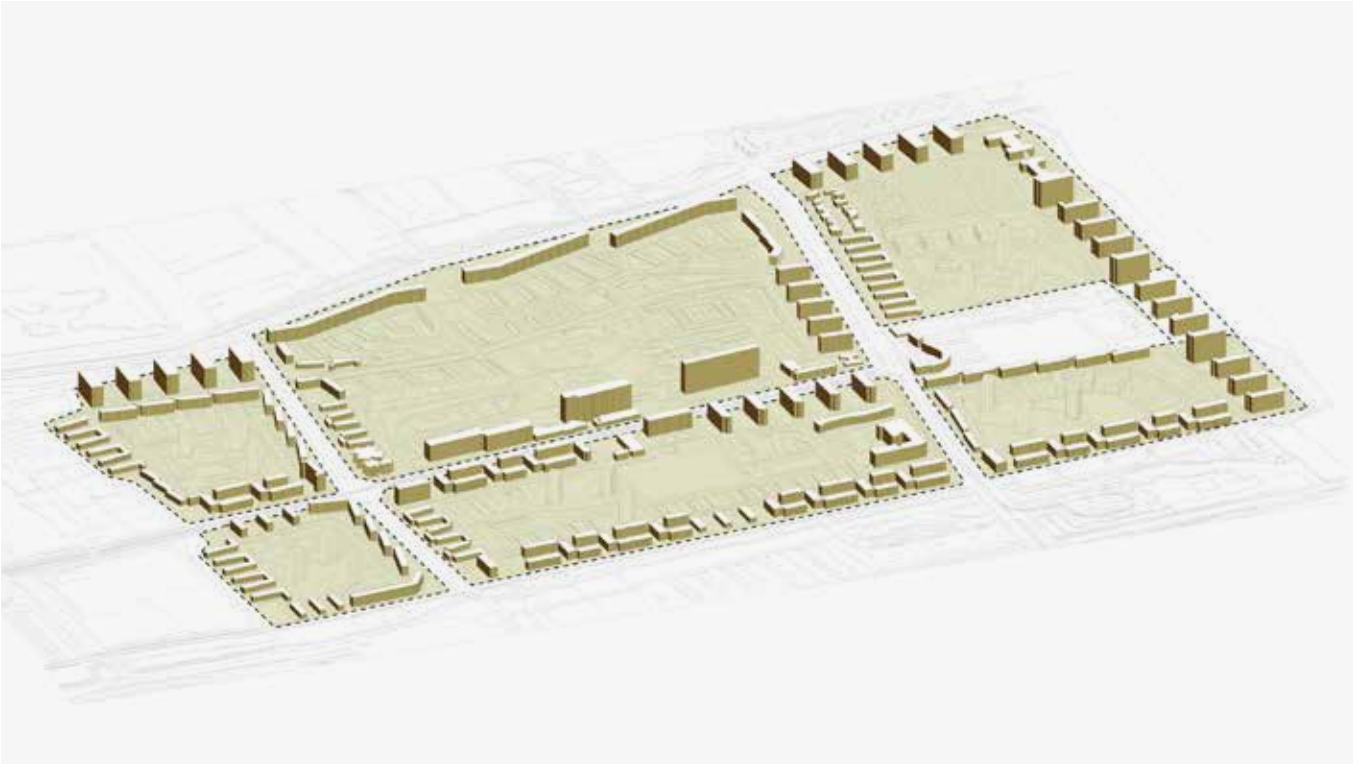


FIG. 2.24 Structural essence, defining six neighbourhoods. Mariahoeve, Den Haag. F. van der Sluis, 1953. Research SteenhuisMeurs, 2005.

B. The spatial essence of the structure: morphology and structure

The second way in which to describe cultural heritage essences is on the basis of the spatial logic of the site, both from an urban planning and an architectural point of view. It is very well possible to replace parts or create new ones within the urban development structure of an ensemble or urban district [FIG. 2.24]. The morphological structure can be broken down into characteristics of urban development such as building line, drainage line, roof ridge, roof shape, roof orientation, texture, structure of the main form, composition of the façades, orientation and accessibility, up to and including the general principles of the materialisation and details. The spatial essence can follow from the urban development logic, but also from the building tradition. For example, the brickwork of Dutch cities, the wood architecture of the Zaanstreek region or the adobe buildings of the southern Netherlands are not fixed in designs, but developed in organising principles: details, main forms, connections, colours, etc. In accordance with the laws hidden in a morphological structure or a building tradition, a designer can keep making new designs that are not identical copies of certain buildings, but follow on in the building tradition of a region (in letter or in spirit).

Lighting design Amstel Station / Amsterdam

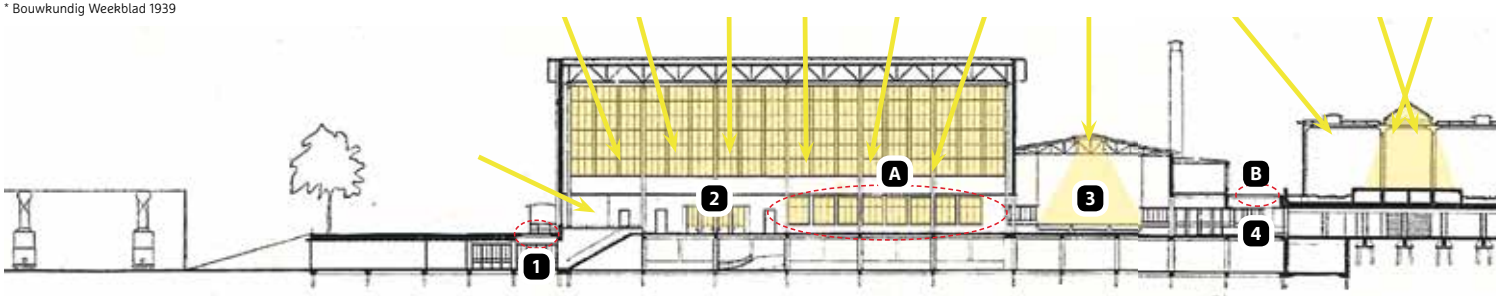
Routing escorted by daylight and artificial light

Cross-section from 1939 with lighting design in yellow and orange. Essential skylights of the tram tunnel and pedestrian tunnel were blocked at a later stage.*

* Bouwkundig Weekblad 1939

A *Shops with taped windows*

B *Skylights blocked*



1 *Tram tunnel*
Skylights blocked

2 *Station hall*
Lower windows shuttered by shops

3 *Transverse hall*
Skylights over entire length and lower windows shuttered by shops

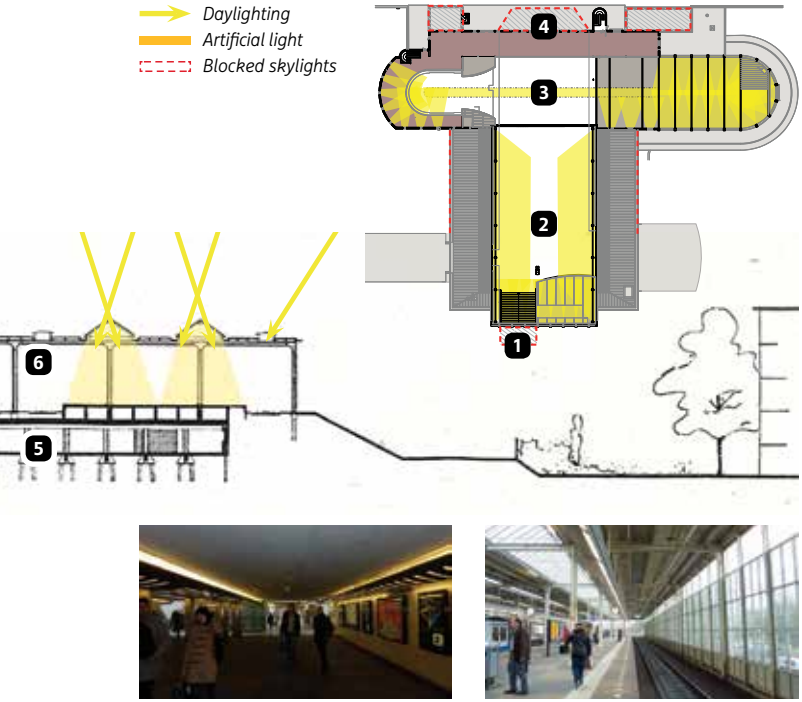
4 *Lower area above control gates*
Skylights blocked

FIG. 2.25 Immaterial value: use of daylight, Amstelstation, Amsterdam. H.G.J. Schelling and J. Leupen, 1939. Research SteenhuisMeurs, 2010.

C. The material essence of the narrative: mentality and stories

The third (and most difficult) way to capture the essence of cultural heritage is through the immaterial value. This concerns the mentality of a place – linked to the ideas on which a certain design is based, or to the associations that have become connected with a place in the course of time [FIG. 2.25]. These ideas may refer to architectonic or social ideals. For example, in the case of monuments of social housing, the social objective (cheap housing) and the ambitions in respect of public housing to provide the masses with a humane existence in the big city. That ideal is fixed in urban development principles (such as Howard's garden city), architectonic principles (the efficient house, the practical kitchen), principles of collectivity (the design of a community and the layout of the outdoor space) and the social commitment (public housing as a public responsibility).

The associative value links a place to long-standing traditions, important events or persons. Although these qualities are not always immediately visible, they are perceptible to all those who know the story.



5 *Pedestrian tunnel*
Quite dark and lit only by artificial light

6 *Train platform*
Plenty of light thanks to skylights and glass walls

FIG. 2.26 Associative value: battle of the Teutoburg Forest (Varusslacht) in Germany, 9 CE.

This plays a role for instance in places of war and conflict (Roman battlefields, Second World War) [FIG. 2.26], torture and crime (prisons, poorhouses), major disasters (Bijlmermeer in Amsterdam, the province of Zeeland) or places which are associated with celebrities (Soestdijk Palace, Pim Fortuyn's residence in Rotterdam, the Czar Peter House in Zaandam).

For the purpose of an intervention, an assessment of the philosophy and the history of ideas can be carried out to show whether these notions are still valid, or can gain new relevance. Nowadays, for example, there is little belief in the makeable society and the somewhat rigid solutions of the neighbourhood idea; however, the need for a clear spatial identity, a differentiated city, a healthy living environment, collectivity and high-quality outdoor space is undiminished. By not immediately brushing aside the post-war residential areas as being outdated, room is created to investigate what added value they have or can get for the contemporary city, and which current challenges or needs they can facilitate. With regard to the associative value, a designer can aim to make these meanings recognisable and perceptible. On 'emotionally charged' locations, that is often the focal point of the challenge – giving shape to the memory.

FIG. 2.27 Material value: architecture Van der Pekbuurt, Amsterdam. J. E. van der Pek, 1917-1926. [FIG. 2.27–2.28]

Van der Pekbuurt, Amsterdam

A hundred years ago, large residential areas were built in the district of Amsterdam-Noord.[39] These consisted exclusively of social housing, which had become possible as a result of the Housing Act. The municipality itself took the initiative. These days, the whole area is a government-protected urban heritage site. This involves tens of thousands of houses which at present, however, are occupied by totally different target groups with totally different living requirements than was originally the case. Family homes of a hundred years ago are nowadays much too small for families and have either been joined together or are occupied by one-person or two-person households. Parking was incorporated at a later stage – often adversely affecting the quality of the green outdoor space. The houses are noisy, the foundations are bad, and there are problems with dampness and the management of the outdoor space. The question is what the focus of the protection should be: to restore and re-establish the original situation (and the outdated forms of housing) or to improve the neighbourhoods and adapt them to contemporary living requirements, with their historical value as a starting point?

39 Urban Fabric / Steenhuis stedenbouw/landschap (SteenhuisMeurs), *Van der Pekbuurt Amsterdam, cultuurhistorische verkenning*, Schiedam 2009.

FIG. 2.28

On the basis of the example of Van der Pekbuurt [FIG. 2.27–2.28], a neighbourhood situated close to the ferry across the river IJ, this dilemma can be illustrated.

A. The material essence
Van der Pekbuurt is architectonically less special than the neighbourhoods that were built in the same period by the architects of the Amsterdam School, such as Spaarndammerbuurt or Van der Takstraat. Architect Van der Pek built 1500 houses in the area, comprising only a few types that were repeated endlessly. The architecture is well-detailed and made up of distinctive features: entrance lobbies, dormers, bay windows, plant boxes, fences. Its specialty lies in the floor plans and the urban design. It is amazing that this ordinary neighbourhood with its low-rise housing was built as early as 1917. Does the conservation of Van der Pek's architecture and the patina in the neighbourhood require the conservation and restoration of all 1500 houses, or might a selection of different types or a characteristic ensemble suffice?

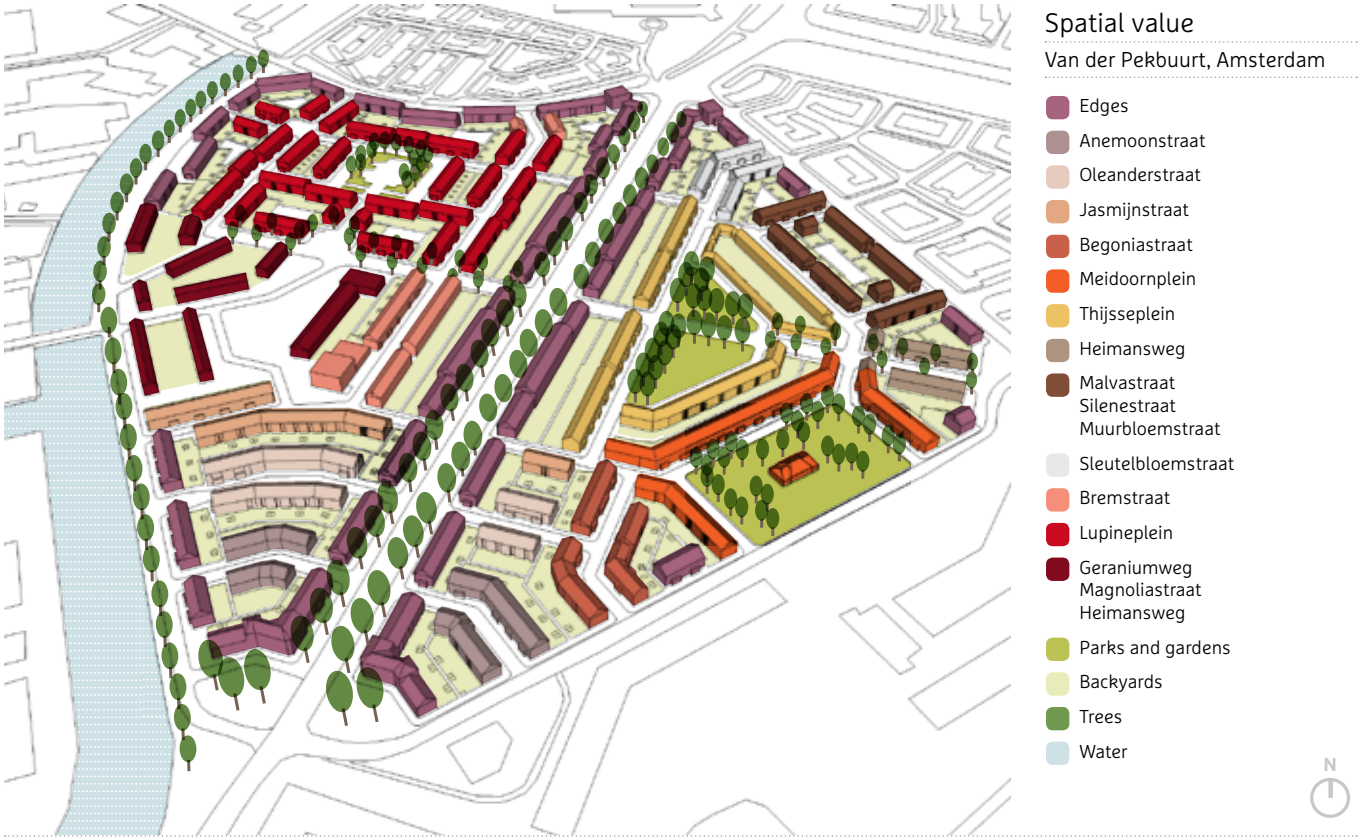


FIG. 2.29 Spatial value (morphological structure): Van der Pekbuurt, Amsterdam.

B. The spatial essence of the structure: morphology and structure
Van der Pekbuurt is a remarkable and interesting urban design. With very simple blocks of flats, an area was created with clear edges, a main axis and recognisable neighbourhoods around neat public spaces and squares – including schools and other facilities. By shifting the blocks of flats in relation to one another and by staggering them, the central squares were subtly emphasised, creating a safe urban inner world in the at that time still open landscape of Amsterdam-Noord [FIG. 2.29]. The morphological structure is the most important recognisable quality of this area. It is a *Gesamtkunstwerk*. It would of course be great if all the blocks of flats could remain there and meet the requirements of contemporary residents. But would it perhaps also be possible to renew certain elements of the structure, and replace part of the outdated housing stock by new buildings with the spatial logic of the urban planning concept and with Van der Pek's constructional toolbox?

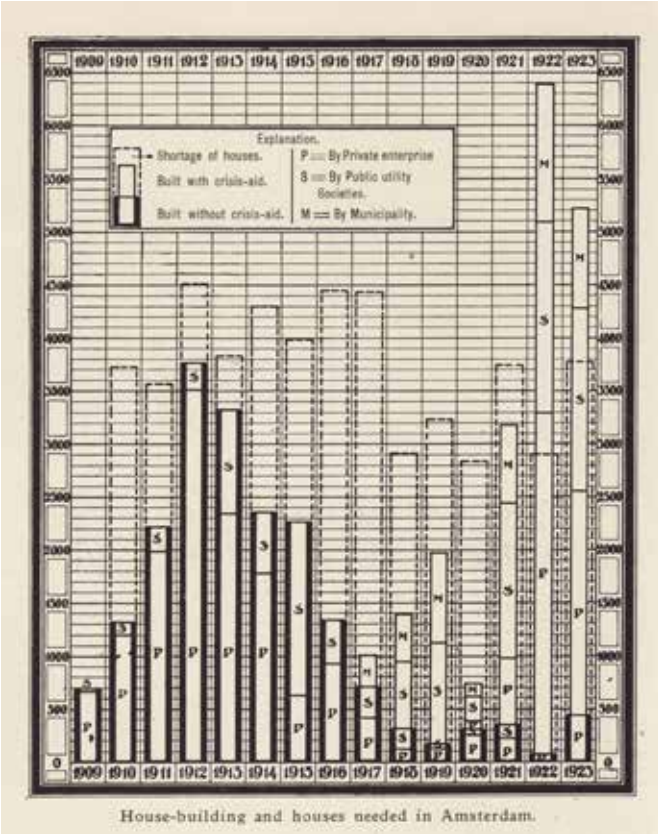


FIG. 2.30 Immaterial value: the social housing revolution in Amsterdam.

C. The immaterial essence of the story: mentality and stories
Van der Pekbuurt is a protected cityscape, which tells the story of social development in the previous century [FIG. 2.30]. The immaterial value of the area can be described by looking at the people involved in this development. Architect J.E. van der Pek was one of the pioneers of social architecture in the Netherlands. For the first time, architects were involved on a large scale with building for people with low incomes, and were experimenting with innovative construction methods and housing types.

Housing supervisor L.C.J.E. Van der Pek-Went represents the involvement of the elite with housing issues. She had been educated in England, and as an instructor she focused on getting working class families and newcomers in the city ready for life in a social neighbourhood. The urban structure bore reference to the ideas for the green periphery of the American landscape architect F.L. Olmsted, who advocated green and clearly structured suburbs, where residents remained dependent on the central city for urban facilities. There were also administrators and politicians such as F.M. Wibaut, A. Keppler and J.W.C. Tellegen, who gave shape to a municipal council that took public housing and urban planning for Amsterdam-Noord into its own hands.

All these Van der Pekbuurt faces represent the immaterial values of this heritage. If the area were to be preserved as an experiment of social housing, it would be strange if the renovated houses would suddenly become unaffordable for lower incomes. Precisely that social dimension (in an environment where gentrification and value increase continues at a strong pace) could be an objective for conservation, just like finding a new purpose for social architecture, structuring social cohesion, integrating newcomers in the city and realising clearly structured, green suburbs. The challenge is to transfer the immaterial values to the present and turn them into a guiding factor for interventions required in respect of maintenance, management and exploitation.

FIG. 2.31 Stadium Feyenoord, Rotterdam. Brinkman & Van der Vlugt, 1934.

De Kuip, Rotterdam

The Feyenoord football stadium in Rotterdam was designed in 1934 by the architects Brinkman & Van der Vlugt [FIG. 2.31]. Currently it is a national monument, but since its construction quite a few changes have been made. A second ring was added, covered stands, luxury boxes, business seats, continuously improved lighting and numerous facilities for crowd control, crowd handling and safety [FIG. 2.32]. In 2014, there was a major debate in Rotterdam about the future of the stadium. A number of different scenarios were put forward, in which – given that it concerned a football club - the cultural value played a remarkably large role.

FIG. 2.32 De Kuip: derby Feyenoord-Ajax, 2015.

The Feyenoord management wanted a new, hypermodern stadium to be built, in accordance with the latest FIFA insights and guidelines. The stadium was to become a cash cow for the club, the logistics concept was to be thoroughly renovated, and more people were to attend more kinds of events. But what to do with the old stadium? For the heritage experts, De Kuip is a highlight of Dutch (stadium) architecture. For Feyenoord supporters, De Kuip is holy ground and a site full of club history, ritual places, works of art and peculiar characteristics.

FIG. 2.33 Intervention design. Molenaar & Co for Reddekuip/Besix, 2014.

FIG. 2.34 Intervention design. Molenaar & Co for Reddekuip/Besix, 2014.

This led to the establishment of an oppositional movement (Save De Kuip), consisting of a kongsi of architects, football supporters and other local citizens – who were not opposed to modernisation, but wanted to reserve some room for history. The design by architect Joris Molenaar for 'Save De Kuip' proves that a renovation of the monument that meets all the requirements and preferences is possible [FIG. 2.33–2.34].[40]

Next, options for a new building while preserving the monument were discussed: a plan for a new arena adjacent to the old stadium. The intention for the monument, similar to what happened with the Olympic Stadium in Amsterdam, was to restore it to its original state, stripped of extensions and modern additions. It could then be used for various purposes in the south of Rotterdam, for example local sporting events. The reconstruction versus the Save De Kuip plan illustrates two ways to interpret the value of the monument.

The reconstruction is focused mainly on the architecture – which is of greater weight than the sporting history and the stadium's function as a temple of football. The transformation is more than anything a matter of experience: the historical continuity of De Kuip as the arena for all the most important matches and the visible signs of history in a contemporary stadium. Rotterdam's plans were eventually cancelled, for the time being, but the discussion will be back. As more new stadiums are built (Wembley, Allianz Arena, Amsterdam Arena, etc.), the significance and the distinctive strength of the stadium, which has kept pace with the time, will increase.

40 Red de Kuip, Kuip 3.0, hand in hand voor de modernisatie van De Kuip, Rotterdam 2013.

FIG. 3.1 Markt Middelburg: urban redesign with reconstructed townhall (see also 2.7).

3 – Heritage-based design

In the twentieth century, architecture was sharply focused on functionality. From an analysis of future use, a picture arose of the required spaces and constructional possibilities. The architectural design was the result of this process.

Archetypes were developed for example for schools, hotels, residential buildings or factories, which today can be found all over the world. Nowadays (in any case in the Netherlands) an assignment often starts with the question of what to do with something that is already there, like an obsolete office building, a former school building, an abandoned factory, a run-down street or a redundant church. It turns out that hardly anything simply fits, but that much becomes possible once you develop an understanding of the qualities and shortcomings of a site and try to think in an unconventional way about programme, space and design.[41]

Thus, the design should concentrate strongly on programming, and on developing an often not previously realised combination of functions - and on the adjustments required for that purpose in a building that is already there. Such adjustments usually concern repairs, installations and usage. The design attitude for monuments and non-monuments is comparable - but in the case of monuments, cultural heritage aspects will naturally carry more weight and have a greater impact on the design choices.

41 Marinke Steenhuis en Paul Meurs, *Herbestemming in Nederland, nieuw* gebruik *van stad en land*, Rotterdam 2011, 6-16.

There is no standard recipe for the architecture of interventions on heritage, nor is there a blueprint for good solutions. Many directions are possible on the basis of the unique value of the object, the culture of the site and the ideas of the architect. However, this does not mean that each proposal will be considered desirable from the point of view of heritage conservation, and will consequently receive support from heritage agencies and the public. The challenge for the designer is to come up with a solution that suits the conditions of the site and to justify the choices in order to gain support and approval. Crucial to this approach is to take the existing situation as the starting point - and to look for a design strategy to give that situation (new) relevance - socially, culturally and economically.

There are three ways to incorporate the cultural heritage quality of the site in the design, namely by:

1. Preservation of existing elements such as buildings or fragments (conservation/restoration of substance);
2. Redefining a structure or an architectural tradition (renewal within the morphological structure);
3. The architectural interpretation or expression of intangible value (using mentality and intangible values as design theme).

FIG. 3.2 Frauenkirche, Dresden (Germany): bombed 1945, restored and reconstructed 2005.

When a dozen architects (who all excel in sensitivity to the context and love for heritage) make a design for the same intervention, this will result in a dozen versions in which substance, morphological structure and mentality will again and again be weighed, mixed and processed differently.[42] Among the multitude of architectural solutions to incorporate heritage in the design, three basic approaches can be distinguished: focussing on the designed past, the designed presence and the non-designed presence.[43] These are introduced below.

3.1 – Designed past

When designing for heritage or in a historical context, the first approach can be that of focussing on the designed past. In that case you choose to design a clone of the local architecture – so that afterwards you will have to look hard to see which building was newly added. Such an intervention can be interpreted as an architectural reconstruction or simulation (not authentic), but also as the restoration of the urban structure and the morphology (authentic). Amongst heritage professionals and architects, the prejudice prevails that replicas and 'historic' or 'historesque' additions are negative, as they might adversely affect the quality and authenticity of the 'real' monuments and historic sites. Besides, there is the conviction that new creations should express the time in which they are made and give shape to the idea of historic continuity. On the other hand: the history of heritage conservation is a continuous show of replicas and pastiche, which in many cases has added to the quality and conservation of our monuments and historic cities. A designer who proposes to 'turn the clock backwards' will have to come up with a good justification and arguments on the authenticity of his project in order to get a building permit.

The history of monument care is steeped in interventions through which the former glory of a monument or an ancient city was newly designed in a scientific or a creative manner.[44] After World War II this happened in many devastated inner cities. Some of these were significantly modernised (Rotterdam), whereas in others it was tried to restore the historic structure (Middelburg) [FIG. 3.1] or to reconstruct the built environment, like Warsaw (Poland) and Rothenburg ob der Tauber (Germany) [FIG. 1.14].

42 Crimson, *Re-Arch, nieuwe ontwerpen voor oude gebouwen*, Rotterdam 1995.

43 This text was partly published in: Paul Meurs, 'Architecture in context, design with history', *Delft Lessons on Architecture* (Reader MSc1), Delft 2012.

44 Winfried Nerdingen, Markus Eisen en Hilde Strobl, *Geschichte der Rekonstruktion, Konstruktion der Geschichte*, München 2010; Jan Friedrich Hanselmann, *Rekonstruktion in der Denkmalpflege*, *Texte aus Geschichte und Gegenwart*, Stuttgart 2009.

FIG. 3.3 Cathedral of Christ the Saviour in Moscow (Russia): demolished 1931, rebuilt 1996-2000.

Dozens, if not hundreds of monuments that were destroyed either by warfare or by fire in the twentieth century were (partially) reconstructed later, such as the Cloth Hall in Ypres (Belgium), Leiden Town Hall, the Church of Our Lady in Dresden (Germany) [FIG. 3.2] and the Cathedral of Christ the Saviour in Moscow (Russia) [FIG. 3.3].[45]

45 The Cloth Hall in Ypres was destroyed during the First World War, reconstruction finished in 1967. The Leiden Town Hall burned down in 1929 and reopened in 1940. The Church of Our Lady in Dresden (Germany) was bombed in 1945 and reconstructed in 2005. The Cathedral of Christ the Saviour in Moscow (Russia): demolished 1931 and reconstructed in 2000.

FIG. 3.4 Rietveld's Sonsbeek Pavillion: built in Arnhem in 1955, moved to National Park De Hoge Veluwe in 1965. Restored by reconstruction, Bertus Mulder 2010.

Also, numerous missing or damaged monuments of modern architecture dating from the previous century were drastically restored and/or reconstructed, such as the Mies van der Rohe Pavilion in Barcelona [FIG. 2.7], Duiker's sanatorium Zonnestraal in Hilversum [FIG. 2.8] and Rietveld's Sonsbeek Pavillion [FIG. 3.4]; in a few cases unbuilt designs were executed years later, such as the Wall House by John Hejduk that was designed for a location in Ridgefield (USA) long before it was built in Groningen.[46]

In the 20th century a number of torn down monuments found a new home in open-air museums, where they were rebuilt and became part of a museum collection (for example in Arnhem, a collection of farms in the forest). The Zuiderzee Museum in Enkhuizen grew into a sort of collage city with reconstructed buildings, where scenes from different towns around the IJsselmeer can be experienced in a historically accurate setting. The Zaanse Schans went one step further; it is a simulated village with authentic monuments in the authentic landscape of the region - freely accessible and inhabited, just like an ordinary historical district in the city [FIG. 1.5].[47]

46 The Mies van der Rohe Pavilion in Barcelona was built in 1929, and reconstructed in 1986. Sanatorium Zonnestraal in Hilversum dates from 1928, and was restored / reconstructed in 2008. Sonsbeek Pavillion was realised in 1955, reconstructed at the National Park De Hoge Veluwe in 1965 and restored by reconstruction in 2010.The Wall House by John Hejduk was designed for a location in Ridgefield, Connecticut (USA) in 1973, and realised in in Groningen in 2000.

47 SteenhuisMeurs, *Beeldkwaliteitsplan Zaanse Schans*, Schiedam 2010; Paul Meurs, 'Vijftig jaar Zaanse Schans, een monumentenreservaat dat geen openluchtmuseum mocht worden', *Bulletin KNOB* 112 (2014) 4, 185-201.

FIG. 3.5 Esonstad: simulation of a historic town. Lanfermeijer Seelen Weijer Architecten, 2006.

Similar (re)constructions also took place in cities that had lost historical features, such as their fortifications. In the 1970's, for example, huge construction projects were implemented to carry fortified towns like Heusden and Bourtange [FIG. 2.14] back in time, mainly to stimulate tourism. The result was a lot of demolition and even more new development, in the name of restoring authentic townscapes. These operations involved very complex and creative design processes, for instance to build a new old people's home, school complex or garage, in such a way that they resembled an 'abstract' part of the 18th century townscape.[48]

Today, the hunger for identity and recognisability is so great that sometimes a non-existent history is staged in a new design. This manifests itself as retro construction in historic cities, and urban expansions with a simulated or stylised historical appearance. The resort town of Esonstad (Landal) demonstrates the possibilities in this respect [FIG. 3.5].[49] It is a compact and modern holiday village in the guise of an ancient fishing town on the Lauwerszee. From the outside, no house looks the same, but the interiors are all alike – up to and including the furniture, dinnerware and bed linens.

48 G.M. Scholten, 'Heusden, verleden, heden en toekomst', Bouw 26 (1971) 1295-1299.

49 Paul Meurs, 'Veilig verpozen in de illusie van een Friese vestingstad', Blauwe Kamer (2007) 6. 78-83.

FIG. 3.6 Huis ten Bosch, Nagasaki (Japan): reproduction and simulation of a Dutch historic city, 1992.

FIG. 3.7 Huis ten Bosch, Nagasaki (Japan): a simulation of eight centuries of urban development. Heeling Krop Bekkering, 1992.

The epitome of a simulated Dutch historic city is Huis ten Bosch near Nagasaki in Japan.[50] In the 1990's, a very credible example of a historically developed Dutch town was realised here, supposedly founded in the 12th century and gradually grown into an important city (urban design Heeling Krop Bekkering) [FIG. 3.6–3.7]. The only thing is that the simulation of the twentieth century is not fully in line with the developments in the Netherlands: newly created thoroughfares, demolition, redevelopment and urban renewal are missing. Thus the perfect idyll of the Dutch city was born, an ideal setting for the Japanese to spend their leisure time and to get a taste of Dutch culture in the many museums, restaurants and shops. It is an authentic cityscape, very cleverly designed down to the last detail, combined with the logistics and the functional layout of a post-modern holiday resort, full of comfort and designed with large numbers of visitors in mind.

50 Paul Meurs, 'Nederland als utopie, Holland Village in Japan', *De Architect* 1992-7/8, 22-33.

FIG. 3.8 Nieuwe Haven, Schiedam: the facade of a former genever distillery breaks down the volume of a new residential complex. De Roon Architecten, 2007. [FIG. 3.8–3.9]

FIG. 3.9

Esonstad and Huis ten Bosch demonstrate that history has become makeable. Anywhere on earth we can design a credible historically grown townscape that is difficult to recognize as fake, even by our own Heritage & Architecture students. The architectural form has become detached from the function, and sometimes also from the construction and the interiors – like in Japan, where the historic Dutch houses are stretched like a brick curtain around large spaces to accommodate mass tourism attractions. Huis Ten Bosch is an extreme example, but it is not exceptional. Our inner cities are full of new developments behind ancient, preserved or simulated façades as well. It is easy to criticise the use of old façades fronting new developments – as both the historic and the contemporary quality are lacking. Sometimes, however, it is the best possible solution, as the old façade can alleviate the massive scale and monotonous appearance of a new development [FIG. 3.8–3.9].

In restoration and adaptive re-use projects, too, a split is often (unconsciously) made between on the one hand the architectural appearance (conservation or reconstruction) and on the other the technical development (invisible updating) and the functional layout (transformation).

FIG. 3.10 Van Nelle, Rotterdam: the construction of a second façade behind the original façade enabled the strict conservation of the exterior. Wessel de Jonge Architecten, 2004.

Examples where the exterior was authentically restored while the interior was based on a completely new design are many, such as the Van Nelle Factory in Rotterdam (a factory converted into offices for the creative sector) [FIG. 3.10], Schunck department store in Heerlen (a department store converted into a cultural centre) and the Resurrection Church in Schiedam (a church transformed into a row of houses)[51]. The design brief for the architects of such restorations is complicated. First of all, the 'original' image must be maintained or brought back, partly with materials and techniques different from those originally used, and according to contemporary standards and building regulations. Secondly, modern usage must be accommodated and be made to inconspicuously meet contemporary usage requirements. These are examples of maximum servitude on the part of architects: linking high level technical design talent with the ultimate objective to remain invisible in the monument as an architect. At the same time, this approach is an example of an appropriation of the historical design, of which the intervention architect makes his own creation. He has slipped into someone else's skin.

51 Van Nelle Factory in Rotterda was restored by Wessel de Jonge Architecten; Schunck department store in Heerlen by Wiel Arets Architects, Bureau Bouwadvies and Jo Coenen & Co Architects. The transformation of the Resurrection Church in Schiedam was designed by GelukTreurniet Architects. Marinke Steenhuis en Paul Meurs, *Herbestemming in Nederland, nieuw gebruik van stad en land*, Rotterdam 2011, 20-25 en 36-39.

FIG. 3.11 Hotel Fouquet Barrière, Paris (France). Maison Edouard François, 2003. [FIG. 3.11–3.12]

FIG. 3.12

3.2 – Designed presence

The second basic approach when designing for heritage or in a historical context focusses on a designed presence, in which case certain features of the existing architecture are used in a new way. There is a connection between the old and the new, but the new design is also autonomous. This may, for example, result in a 'historical' form of modern materials, or in a contemporary architectural design with historical materials. An example of the former is Hotel Fouquet Barrière in Paris (France) [FIG. 3.11–3.12]. Architect Edouard François casted the characteristic boulevard façade designed by Baron Haussmann in concrete - including windows and decorations - and went on to punch out modern windows. The use of traditional materials in contemporary buildings is common, for instance local brick being used in an innovative way. New architecture can blend into its surroundings through the choice of colours (camouflage), the materialisation (texture and colour), the scale and morphology (urban logic) - but the design can also willfully distort the context, make a mark (icon) and apply a dramatic or poetic interpretation.

FIG. 3.13 Gallery 'Am Kupfergraben 10', Berlin (Germany). David Chippenfield Architects, 2007.

The gallery house 'Am Kupfergraben 10' in Berlin (Germany), designed by David Chipperfield, shows that the result can remain far from imitation: the volume is carefully shaped in line with its neighbours on both sides, it corresponds in colour and horizontality – but is completely different as regards composition and proportion of window openings [FIG. 3.13].

The history of interventions shows that periods of reconstruction and simulation are followed by periods of purist restorations, avoiding interpretations of the monumental issue. In response to rampant reconstructions in the late 19th century, and following the devastation caused by the First and the Second World Wars, it was advocated to take

good care of the existing heritage, but to keep changes and additions recognisable as a new time layer.[52] Particularly in the second half of the 20th century, this approach led to many misunderstandings in architecture, such as the notion that contrast is the only appropriate way to build in a historical context. This was prompted by the idea that there was a rupture between the past and modern times, which could only lead to contrasting additions. This resulted in dogmatic solutions and the disappearance of site-specific designs. There are countless examples all over the world of this 'rigid' (and sometimes almost 'autistic') architecture - where important monuments have turned into a backdrop for conspicuous, discordant additions like dormers or small anexes. Although the historical building substance (or in other words any physical characteristic of the monument still present) may well have been excellently taken care of and preserved, one might wonder whether the authentic monument can still be experienced and retains its integrity and credibility. Polemic interventions in historic sites either deal with scale (too big, too high or too wide) or the architectural design (disruption of the built fabric).

As described in chapter 1, The Netherlands has in recent years witnessed a huge development in design on or near monuments. Heritage care is gradually evolving towards a development-oriented approach and is more and more agreed that this may also be visible. Architecture has shown a renewed interest in history, tradition and local identity, which translates into controversial contemporary architecture relating (in innovative ways) to the past and to built heritage. The most important consequence of this development is that the approach to interventions has entered the heart of the architectural debate and that high quality interventions have been realised. This addresses the entire creative spectrum of the approach to interventions. Concepts like 'modern' or 'traditional' have lost their meaning, because it is a matter of all-in-one, involving the creative, sensitive and innovative way in which old and new can merge, be exchanged or coexist in every possible way.[53] Through the interventions, the monuments are literally brought up to date, they are included in the annals of architecture. But this appreciation does of course not guarantee that the interventions strengthen the heritage and add positively to its conservation and divulgation.

The interest for contextual design and a careful blend of the old and the new is not a recent phenomenon. Throughout the 20th century, individuals all over the world tried to reconcile monuments with modern architecture, all in a different way and with different ideals and strategies. These international 'exceptions' match remarkably well with the trend in (Dutch) heritage of conservation through development and architectural design. Early examples of this approach are the Italian Carlo Scarpa [FIG. 3.14–3.18], the Brazilians Lúcio Costa and Lina Bo Bardi [FIG. 3.19–3.22], the German Karljosef Schattner [FIG. 3.23–3.26] and Geoffrey Bawa from Sri Lanka.

Recent international examples are shown in the case studies below. In the Netherlands, architects like Jos Bedaux (Tilburg), Harry Rademaker (Deventer) [FIG. 3.27–3.29], and Piet Tauber (Alkmaar) [FIG. 3.30–3.31], come to mind as frontrunners of contextual modern design.[54] Swedish architect Ralf Erskine fits in too, with his projects in Schiedam and Grave (FIG. 3.32).

52 Nederlandsche Oudheidkundigen Bond, 'Grondbeginselen en voorschriften voor het behoud, de herstelling en uitbreiding van oude bouwwerken', *Bouwkundig Weekblad*, 37 (1916) 5, 50-55; ICOMOS, *II-nd International Congress of Architects and Technicians of Historic Monuments*, Venice, 1964.

53 Jo Coenen, *De kunst van de Versmelting The Art of Blending* (oratie), Delft 2007

54 Paul Meurs, 'De exoten van de moderne architectuur', Forum, 2012-1, 88-95 (also published in SteenhuisMeurs, *Casa de Cultura in Velasco, Cuba*, 2014).

FIG. 3.14 Museo di Castelvecchio, Verona (Italy). Carlo Scarpa, 1958-1974. [FIG. 3.14–3.18]

FIG. 3.15

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FIG. 3.17

FIG. 3.18

FIG. 3.19 Ladeira da Misericórida, Salvador (Brazil). Lina Bo Bardi, 1987.

FIG. 3.20 Teatro Gregório de Mattos, Salvador (Brazil). Lina Bo Bardi, 1986.

FIG. 3.21 Casa do Benin, Salvador (Brazil). Lina Bo Bardi, 1987.

FIG. 3.22 Casa do Benin, Salvador (Brazil). Lina Bo Bardi, 1987.

FIG. 3.23 Diözesanarchiv, Eischstätt (Germany). Karljozef Schattner, 1994

FIG. 3.24 Katholische Universität Eischstätt-Ingolstadt, Eischstätt (Germany), Ostenstrasse. Karljozef Schattner, 1980.

FIG. 3.25 Katholische Universität Eischstätt-Ingolstadt, Eischstätt (Germany), Rechenzentrum und Journalistikgebäude. Karljozef Schattner, 1987.

FIG. 3.26 Katholische Universität Eischstätt-Ingolstadt, Eischstätt (Germany), Kollegiengebäude, Karljozef Schattner, 1965.

FIG. 3.27 Restoration Polstraat 2-6, Deventer. Harry Rademaker, 1985.

FIG. 3.28 City Archive, Deventer. Harry Rademaker, 1972.

FIG. 3.29 Restoration Kerksteeg 4-10, Deventer. Harry Rademaker, 1972.

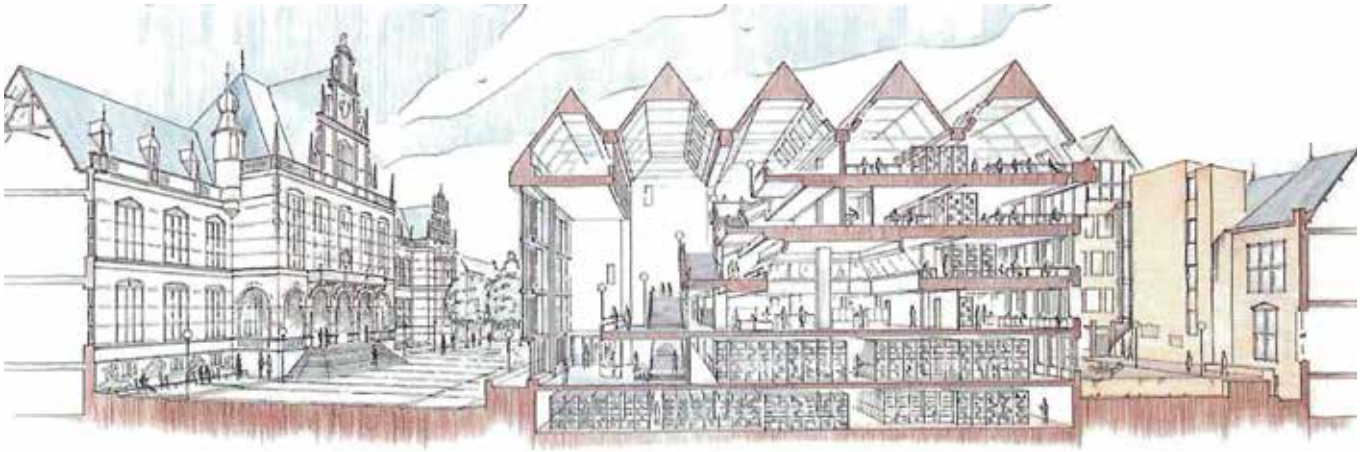

FIG. 3.30 University Library Groningen. Piet Tauber, 1987. [FIG. 3.30–3.31]

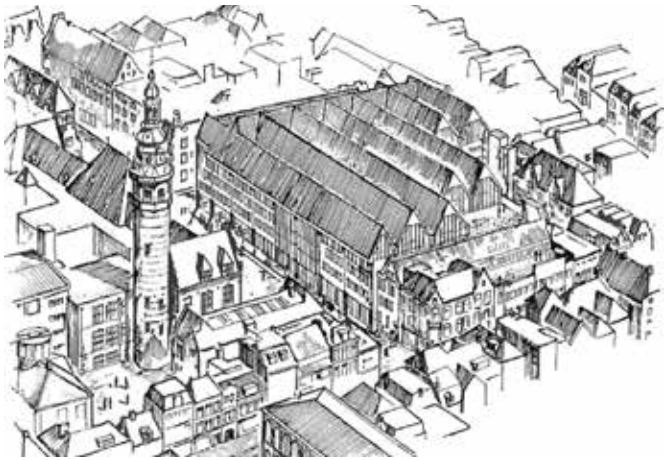

FIG. 3.31

FIG. 3.32 Infirmerie Grave. Ralph Erskine, 1996.

FIG. 3.33 BK-city, Delft. Model production hall. BK City Five, 2008.

Rearrangement

The increased architectural interest in location, site, tradition and identity is reflected in the creative ways in which designers are trying to relate to, emulate or continue to build on what is already there on a particular site. The result can be that, although the architecture of the redesign is prominent, there always remains some form of cohesion with the existing design. Old and new engage in a dialogue, as this is called - or they merge into something new: either by preserving existing elements, or by renewal within the morphological structure or giving new interpretations of the immaterial qualities in the design. Again, examples abound, such as close to home BK City (Braaksma & Roos, Octatube, Fokkema & Partners, Kossmann, deJong, MVRDV) [FIG. 3.33–3.36].

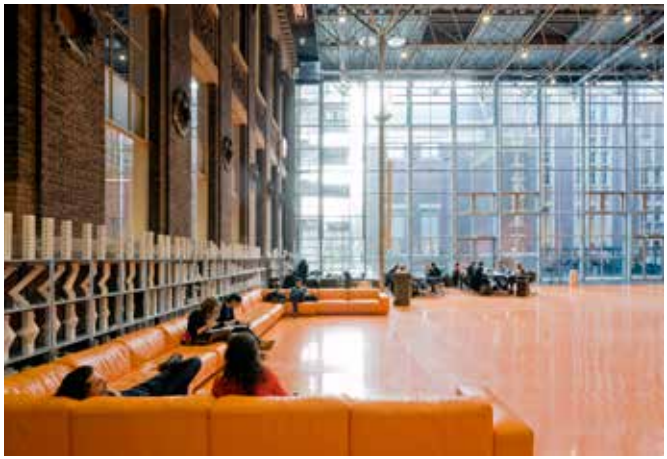

FIG. 3.34 BK-city, Delft. Oostserre. BK City Five, 2008.

FIG. 3.35 BK-city, Delft. Espresso bar. BK City Five, 2008.

FIG. 3.36 BK-city, Delft. Picknick area. BK City Five, 2008.

FIG. 3.37 Jobsveem, Rotterdam. Mei Architecten, 2007. [FIG. 3.37–3.41]

In Rotterdam, Jobsveem was transformed from a warehouse into an apartment building (Mei Architects). What was old was painstakingly restored, but the new design manifests itself in the form of three radically large holes cut in the walls - to allow daylight into the stairwells and homes. New architecture was realised, while the warehouse at the same time retained its character [FIG. 3.37–3.41].

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FIG. 3.42 De Zwijger, Amsterdam. Architectenbureau J. van Stigt, 2006. [FIG. 3.42–3.43]

Another warehouse, De Zwijger in Amsterdam, was partly demolished, despite its status as listed monument, in order to make way for a bridge to pass through the building. The constructive repair of the monument was accompanied by the transformation into a cultural centre – which is now flourishing amidst the traffic and buzz of the new setting [FIG. 3.42–3.43].

The fourth example is the former waterworks in Dordrecht. This monumental ensemble consisted of unused water basins, a water tower and a pumping station. The site was transformed into Villa Augustus, a hotel with restaurant in a garden, with an abandunce of flowers and vegetables. With the addition of an elevator and the transformation of the water mirror into the garden, a completely new

FIG. 3.43

FIG. 3.44 Villa Augustus, Dordrecht. D. van der Have, H. Loos and D. de Vos, 2007. [FIG. 3.44–3.45]

FIG. 3.45

yet 'authentic'atmosphere was created, which was an instant success – in terms of profit and city branding, as well as placemaking of the vicinities. For these projects [FIG. 3.44–3.45].

FIG. 3.46 Neues Museum, Berlin (Germany). David Chipperfield Architects, 2009. [FIG. 3.46–3.50]

Makeover

Some designers go to great lengths to take possession of a location, to redesign while letting history and the existing building remain omnipresent. The Neues Museum in Berlin (Germany) is contrast and symbiosis combined [FIG. 3.46–3.50].[55]

The intervention by David Chipperfield involved the completion and restoration of a museum shot to pieces during the war. The new building is indeed new, but to a very large extent inspired by the old situation: by the 1855 grammar and syntax. The building was completed, but not restored. It forms one whole, but tells three stories: of an ancient monument, of the destruction and of the new age.

55 Rik Nys en Martin Reichert (ed.), *Neues Museum Berlin*, 2009.

FIG. 3.47

FIG. 3.48

FIG. 3.49

FIG. 3.50

Guideline for the design was not to preserve the existing situation; some spaces were fully restored or reconstructed, some were left untouched. This resulted in a succession of spheres partly designed and partly derived from history, in which the exhibition of ancient art from Egypt fits admirably.

FIG. 3.51 Pinacoteca do Estado, São Paulo (Brazil). Paulo Mendes da Rocha, São Paulo, 1998. [FIG. 3.51–3.54]

The Pinacoteca of São Paulo is another monument that was thoroughly revamped [FIG. 3.51–3.54].[56] Paulo Mendes da Rocha had the museum stripped down to its bare essentials. All the stucco layers were removed from the façades and the courtyards to reveal the ancient masonry, including repairs and scaffolding holes. The courtyards were covered with a glass roof, spanned with steel bridge sections and stripped of windows and doors. The museum's main entrance was moved to the side of the building and the central axis was rotated 90 degrees.

56 Emanoel Araújo (ed.), *Pinacoteca do Estado de São Paulo, um restauro em ação*, São Paulo 2002.

FIG. 3.52

FIG. 3.53

FIG. 3.54

As a result, within the old building a completely new museum was created in terms of space, logistics and functionality, where the past can be sensed at every step. The monument was incorporated into the new museum – became part of a new monument, with a past that was as tangible as it was visible.

FIG. 3.55 Ketelhuis Ceres, TU Eindhoven (before intervention). S.J. van Embden (OD205), 1959, extension 1967. [FIG. 3.56–3.57]

FIG. 3.56

FIG. 3.57

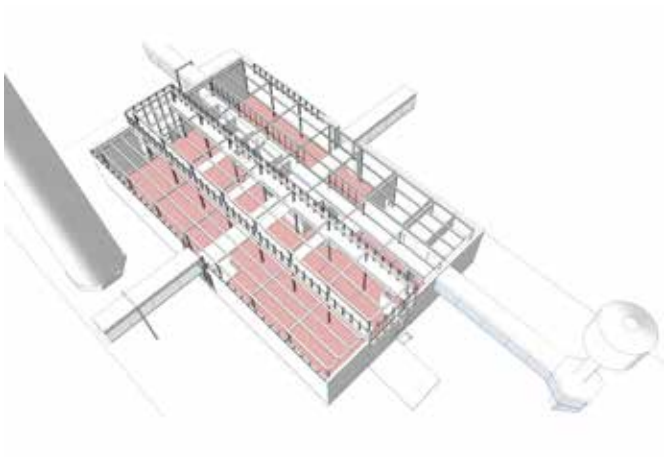

FIG. 3.58 Ketelhuis Ceres, TU Eindhoven: architectural features. [FIG. 3.58–3.59]. Research SteenhuisMeurs, 2010.

Ketelhuis Ceres: the power station of TU Eindhoven

The power station at the campus of the University of Technology in Eindhoven dates back to 1959 [FIG. 3.55–3.57]. It was designed by S.J. van Embden as part of a family of buildings, with an open structure, 'floating' façades and entrances, colour accents, skywalks between the buildings, a green setting and the consistent use of a measurement system of 6.2 x 6.2 meters. The power station became an icon of the campus, thanks to the chimney, the water tower and the closed façades. The introvert building had a surprising spatial interior, with a basilican construction and abundant daylight coming in from the roof. The heart of the building was the control room; the place from which all systems could be checked – as in a panopticum.

Architectural features

Ketelhuis Ceres, TU Eindhoven

1. System of pedestrian bridges (connection to other faculties)
2. Use of striking colors in facades, doors and bridges
3. Floating entrances
4. Curtain wall facades
5. Facades with dark gray masonry (used in all the buildings from the 1st generation)
6. Squares and green function as a frame around the buildings

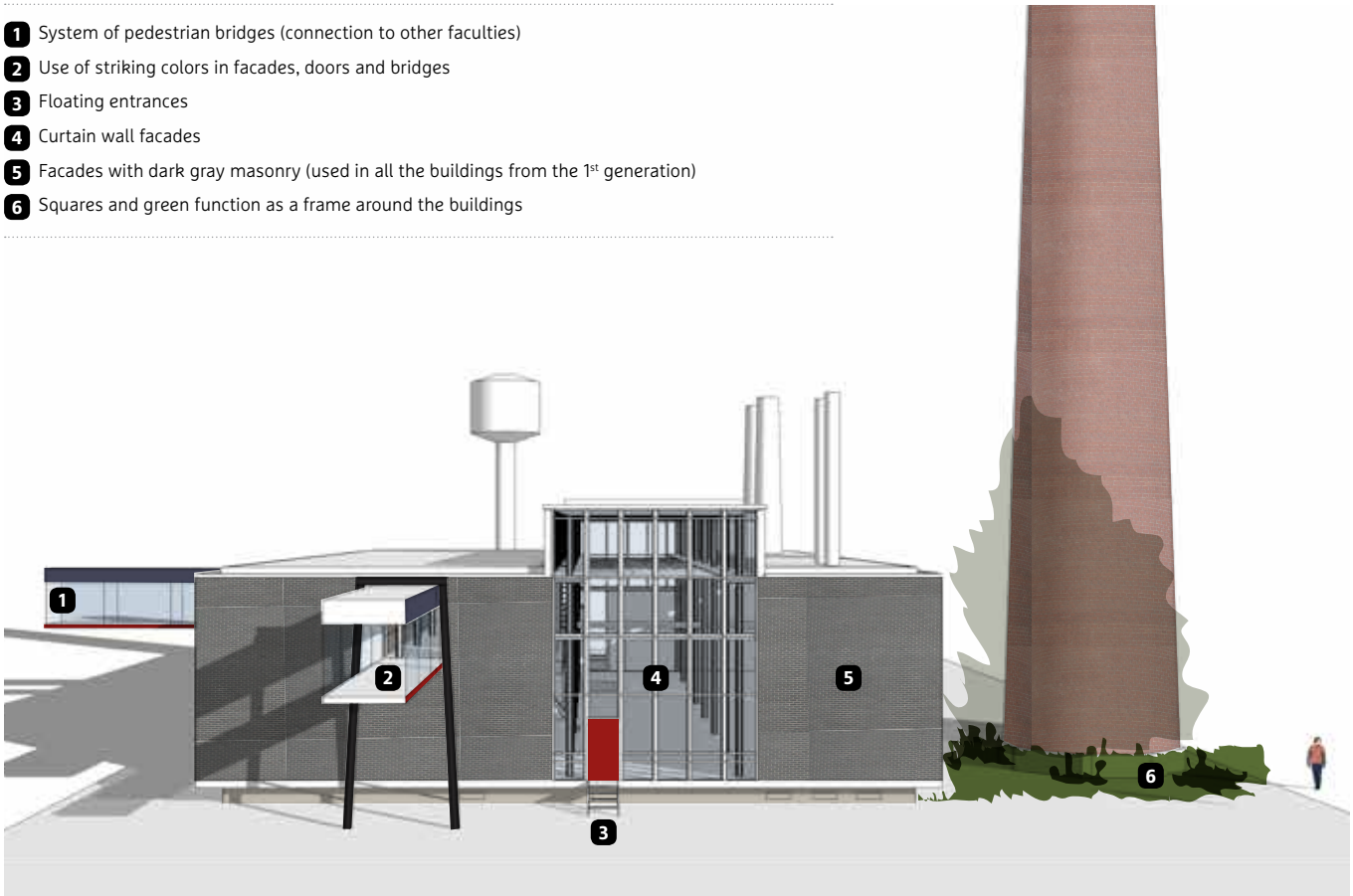

FIG. 3.59

After the building lost its function, the municipality entered into a gentlemen's agreement with the university: the buildings would not be listed as monuments, but the cultural value would become leading in the re-use. The value assessment listed all the urban, architectural and immaterial values – and processed them into design themes and recommendations. The key issue became to reinterpret the 'family features' of the campus buildings and the specific characteristics that made Ceres stand out as an icon in this ensemble: chimney, water tower, closed character, the panopticum, the skylights and the skywalks [FIG. 3.58–3.59].[57]

57 Urban Fabric | Steenhuis stedenbouw/landschap (SteenhuisMeurs), *Ceres (Ketelhuis) TU/w, cultuurhistorische verkenning*, Schiedam 2009.

FIG. 3.60 Research Institute ICMS, Ketelhuis Ceres, TU Eindhoven. Diederendirrix Architecten, 2012. [FIG. 3.60–3.64]

As a complication, the new function was very different from the original one as a power station: the building had to be transformed into the home of the research institute ICMS, an office that would make a connection with the outside world and provide an attractive working environment. Diederendirrix redesigned Ceres not by the literal conservation of the existing building, but from the reinterpretation of key values and design features [FIG. 3.60–3.64]. Through the recycling of the casco, the new office building became a closed entity, yet open to the outside world. The centrality of the control room was replaced by a central meeting place. The refurbishment was awarded with the title 'Building of the year' in 2013 by the Dutch Union of Architects (BNA).

FIG. 3.61

FIG. 3.62

FIG. 3.63

FIG. 3.64

FIG. 3.65 Museu das Missões, São Miguel das Missões (Brazil). Lúcio Costa, 1937.

Narrative

By taking the intangible qualities of a place as the starting point for a design, the invisible can be made visible or tangible. An example is the Museu das Missões in São Miguel das Missões (Brazil), designed by Lúcio Costa in 1937 [FIG. 3.65].[58] Of the mission village of the Jesuits, which had vanished centuries ago, nothing but an impressive, eroded church ruin remained. Costa regarded the assignment to build a museum in the immeasurable emptiness bordering the immense ruin as an opportunity to create a reference to the lost village, where Indians and Jesuits once lived together. He reconstructed a few houses - with a tiled roof, an old arcade of columns found on the spot; but he equipped them with glass façades. The museum handed the forecourt back to the church; the measurements became apparent through the positioning of the new building. The fabric of the city, the building block, the apartment and the ordinary architecture also became visible – but were not literally brought back. There was just the suggestion, in an otherwise contemporary museum. In that way, the building became part of the story that the museum wanted to tell.

The suggestion of what has disappeared comes back in the House Van Zessen in Alblasserwaard [FIG. 3.66]. This monument of De Stijl (designed by Cornelis van Eesteren and Theo van Doesburg) was restored, but apparently could not be understood architecturally without the neighbouring house – which had been demolished. As part of the restoration the missing silhouette was brought back, accentuating at the same time both the presence and the absence of the neighbouring house.

58 Lúcio Costa, *Registro de uma vivência*, São Paulo 1995, 488-497; Paul Meurs, 'Modernisme en traditie, monumentenzorg in Brazilië', *Archis*, 1994-6, 70-80.

FIG. 3.66 Huis van Zessen, Alblasserwaard. Bertus Mulder, 1990.

FIG. 3.67 Glass Farm, Schijndel. MVRDV, 2013. [FIG. 3.67–3.68]

FIG. 3.68

The interplay of old and new, as practised by architects when designing interventions on existing buildings, can also be given shape in other ways in new constructions, whether or not on a historical location. The Glass Farm by MVRDV is an example [FIG. 3.67–3.68]. It is a commercial building on the village square of Schijndel, next to the church and the town hall. MVRDV took the construction volume of the typical local farms, blew it up somewhat, and executed it in glass coated with a print on which a collage of historic farms in the area can be seen. The volume blends in well with the morphology of the square. The prints represent an unusual interpretation of the notion of historical stratification. In the interior, where the print shown on the outside of the farm returns, the effect is alienating. The building is brand new, but was born with a built-in history and a powerful narrative.

Friendly alien?

A controversial example of a designed presence is the Kunsthaus, designed by Peter Cook & Colin Fournier in the Austrian world heritage site of Graz [FIG. 3.69].[59] At first sight, this 'friendly alien' makes no connecton with the context at all: volume, materials, texture and shape stand out as screaming contrasts in the historic environment. Does this public building add Anything to the quality of the heritage? Or does it merely turn the world heritage into its backdrop? There are some arguments in favour of this intervention. Firstly, it does not dominate the skyline of Graz and makes an impact only on a local level. Secondly, it is a gesture that brings the historic city into the modern age, instead of turning it into an artificial open air museum. Thirdly, it might help to attract other visitors than just tourists to this inner city, and make them look at the historic city with other eyes. However, the question for the local community and heritage agencies to answer remains how this type of intervention affects the cultural values, as they themselves have defined them.

59 Peter Cook, Colin Fournier and Cedric Price, *A Friendly Alien: Ein Kunsthaus fur Graz*, Ostfieldern, 2004.

FIG. 3.69 Kunsthaus ('a friendly alien'), Graz (Austria). Peter Cook and Colin Fournier, London, 2003.

FIG. 3.70 Piet Hein Eek, Strijp R, Eindhoven. 2010. [FIG. 3.70–3.74]

3.3 – Non-designed presence

Whether caused by lack of money and the financial crisis, or by the desire for purity and authenticity – it is a fact that many high-profile projects in recent years were actually hardly designed in the sense of architectural design. The Dutch designer Piet Hein Eek, for example, liked the dilapidated ceramics factory at Strijp R enough to accommodate his workshop and showroom there [FIG. 3.70–3.74]. For him, the factory has the same message as his scrap wood furniture: imperfect products too can contain beauty and satisfy our sense of aesthetics and functionality.[60]

60 Steenhuis en Meurs 2011, 138-143.

FIG. 3.71

FIG. 3.72

FIG. 3.73

FIG. 3.74

FIG. 3.75 Bruishuis, Arnhem, 2009.

FIG. 3.76 Overhoeks tower and A-Lab, Amsterdam, 2013.

The same attitude is found at the Bruishuis in Arnhem (community centre with cheap office spaces and social housing for specific target groups, like elderly minorities or people in the process of divorce) [FIG. 3.75], at the student campus in Diemen-Zuid (empty office buildings dating from the seventies, transformed into a campus with almost 1000 apartments) or at the prestigious A-Lab in Amsterdam (a former Shell laboratory converted into a lab with work stations for top talents of the creative industry in Amsterdam) [FIG. 3.76–3.77]. Precisely by not designing, a recognisable place is created in all these and numerous other examples, a stage for unexpected urban quality and encounters.

FIG. 3.77 A-Lab, Amsterdam, 2013.

FIG. 3.78 Bookstore Dominicanen, Maastricht. Merkx + Girod, 2005.

FIG. 3.79 Waanders in de Broeren, Zwolle. BK Architecten, 2013. [FIG. 3.79–3.80]

FIG. 3.80

The innovation of recent non-designed interventions lies in the usage, the programming and the furniture – resulting in inexpensive and flexible ways to provide cities, areas or buildings with a new vitality and economic perspective. A successful type of intervention is leaving the monument untouched, but creating XL furniture to house the new programme.

This is useful for the transformation of churches, as the spatial structure and spiritual experience can be maintained. Examples are the bookstores in the Dominicanerkerk in Maastricht [FIG. 3.78] and Waanders in de Broeren in Zwolle [FIG. 3.79–3.80], as well as the theatre Het Speelhuis in the Our Lady of Resurrection Church in Helmond [FIG. 3.81–3.83].

FIG. 3.81 Theatre Het Speelhuis, Helmond. Cepezed Architecten, 2012.
[FIG. 3.81–3.83]

FIG. 3.82

FIG. 3.83

FIG. 3.84 Kunststad, NDSM-shipyard, Amsterdam. Collective of artists and Dynamo Architecten, 2007. [FIG. 3.84–3.86]

The same approach can be seen in the halls of the former NDSM-shipyard in Amsterdam [FIG. 3.84–3.87], where three-story steel racks were installed to be eventually occupied by entrepeneurs who constructed their own offices - inspired by Constant (New Babylon), Le Corbusier (Plan Obus), Ikea and the favelas in Rio de Janeiro.[61]

61 SteenhuisMeurs, 'Reuso na Holanda, reciclagem de patrimônio histórico', Brasília 2015.

FIG. 3.85

FIG. 3.86

FIG. 3.87 Faralda Crane Hotel, NDSM-shipyard, Amsterdam, 2014.

FIG. 3.88 SESC Pompéia, São Paulo (Brazil). Lina Bo Bardi, 1986. [FIG. 3.88–3.91]

Minor changes, maximum impact

The non-designed presence does not mean that adaptive re-use is little more than carrying out some minor jobs and then move in. Even though the budget is low and the interventions remain limited, the design is essential to give buildings a 'wake up kiss' or to set processes in motion whereby an old building is gradually discovered, opened up and developed by new occupants or users. Adaptive re-use is increasingly becoming a process of minor changes, with major implications for the usability or the appearance of a building.

The leisure centre SESC Pompéia in São Paulo (Brazil), for example, is accommodated in an old factory [FIG. 3.88–3.91].[62] The project is quite old (1986), but amazingly up-to-date.

FIG. 3.89

FIG. 3.90

FIG. 3.91

The story has it that after Lina Bo Bardi had been commissioned to design this centre, she came to the conclusion that the project was in actual fact already functioning in the buildings that were supposed to be demolished. The local residents were using the ruinous factory to relax, eat, play and meet. She limited her design to facilitating the use of the factory complex and connecting it to the city. Her design constituted an entrance gate, stands, and large concrete items of furniture. Thus, a natural urban oasis arose in the city, and every day of the week it is packed with users, passers-by and local residents.

62 Marcelo Carvalho Ferraz (ed.), *Lina Bo Bardi*, São Paulo 1993, 220-235; Paul Meurs, 'De Braziliaanse identiteit en het Moderne; het werk van Lina Bo Bardi', *De Architect*, 1994-5, 62-77.

FIG. 3.92 Zollverein Kohlenwäsche, Essen (Germany). OMA, 2007. [FIG. 3.92–3.94]

FIG. 3.93

FIG. 3.94

The Ruhr Museum in the Zollverein World Cultural Heritage Site near Essen (Germany) is another example of cautious intervention [FIG. 3.92–3.94]. The restaurant is little more than a collection of (expensive) plastic chairs and tables placed on a raised platform in an old dilapidated factory. Anything but design.[63] The great difference made by the advent of the museum is the crowds, reminiscent of a town square on a Saturday afternoon. The design concentrated mainly on channelling those visitor streams. OMA designed a routing for the visitors, inspired by the transportation of coal in the old mining days. So there are slipways and escalators to lead the way and guide the visitors through the buildings. The entrance of the museum is dark with glowing lights – as a counterpart to the fire of the blast furnaces to which the coals were once transported.

3.4 – What can designers do?

As a result of the crisis in the building sector, redevelopment has become today's major challenge. Empty buildings stimulate entrepreneurship of individuals and groups of people, who decide to join forces, with or without architects, in order to develop successful business cases. This kind of cooperative development leads to new typologies and forms of spatial organization (for instance in former office buildings, commercial buildings, communal residential groups and workshops). For the designers of the future, there are good opportunities to contribute their craftsmanship and creativity to these bottom-up processes. However, this will require a different kind of architect from the ones who faced the challenges of the past.

63 Ulrich Borsdorf en Heinrich Theodor Grütter, *Ruhr Museum, Natur, Kultur, Geschichte*, Essen 2010, 16-61.

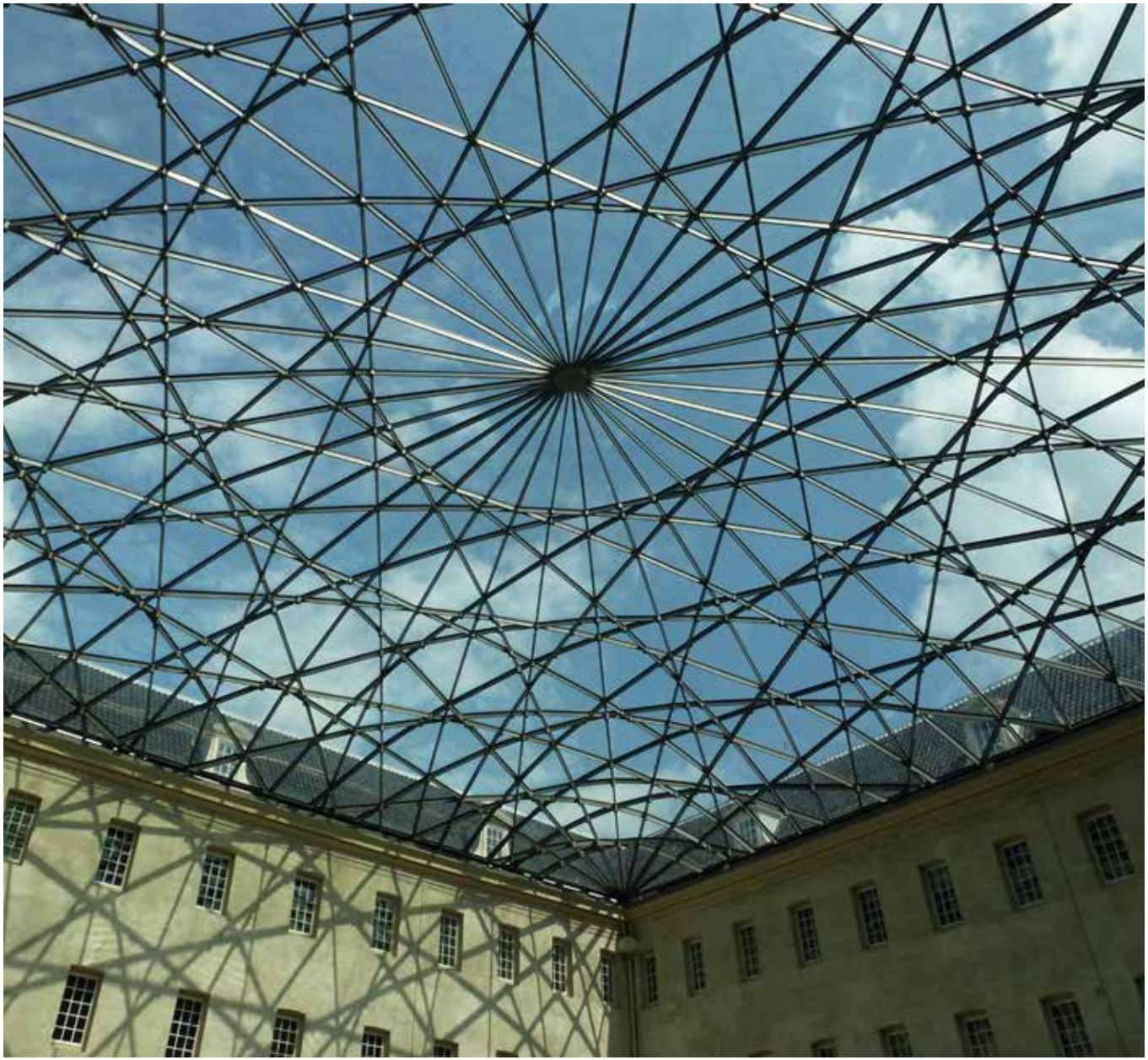

FIG. 3.95 Glass roof Scheepvaartmuseum Amsterdam, Dok Architecten and Ney + Partners (engineering), 2011.

Afterword

This book addresses the question of how to design in a historical context. How to get a grip on a site? How can a designer incorporate existing qualities of the heritage in the design? In three chapters, it is described how the conservation of heritage has increasingly become an issue of planning and intervention, with the specific cultural heritage qualities of a site as the starting point for transformation.

There are several different approaches to embed the design in the site: focussing on the designed past, the designed presence and the non-designed presence. The better the essences of the meaning of the cultural heritage (substance, structure and narrative) are exposed, the better the design can focus on these. However accurately the different process steps are adhered to – in the end the quality of the design will determine the degree of success: it's a thin line between a disaster and a brilliant intervention. The design challenge is to give a site new vitality while at the same time preserving its value.

Over the past decade, my office has dealt with all kinds of interventions and new developments. In teams of designers and historians we have analysed buildings, areas and landscapes to discover their visible and invisible qualities. How did they become what they are today? What were the ideas and ideals at the time of their realisation? To what extent has a site withstood the test of time, and how can the concepts, structures and stories from the past be deployed in current challenges? We gradually try to get to the core: the legacy for the future and the exact nature of the assignment – viewed from the perspective of the cultural heritage value. Defining that value is a design on its own, just like history itself is. It is a creative process, in which the views and opinions of others carry considerable weight, but where you as the specialist will have to make the final assessment to arrive at decisions and legitimation. This will create a heritage base for the design to respond to and build upon.

There is no lack of good intentions to integrate heritage in a design. However, that doesn't necessarily mean that heritage values are safe in the hands of an architect. Far too often one gets the impression that the designer makes light of the job, by haphazardly including a couple of ancient relics or some monumental fragments (cherry picking), or by forcing a format or a blueprint onto a special site. Designers also frequently limit the cultural heritage aspect to their own visual perception and display an almost hostile attitude towards the views and interpretations of the heritage sector. The underlying reasons for such an attitude are to be found in the history of modern architecture, where for a century or more the past has been

regarded as an impediment for the designer. With such a background, it is difficult to relate to cultural heritage with an open mind. Fortunately this is a rearguard action. These days, a diversity of designers all illustrate in their own way what can be won by architecture when it is nourished by the heritage. By leaving space in the design for what is already there, by getting inspiration from the stories of others, and making use of what is available, the circumstances will be created for the heritage to survive an intervention and, moreover, to derive new meaning and values from it.

A good example of responding to a site is designer Piet Hein Eek's factory in Eindhoven. With a high degree of open-mindedness he lets the existing quality speak for itself, at the same time linking it to his own universe and the Piet Hein Eek brand. This serves to refresh the site and to make it attractive for new target groups. Robert Winkel (Mei Architects) takes a different approach: he uses the cultural heritage framework to explore the boundaries of a possible intervention. While doing the utmost justice to the cultural heritage value, he carries out radical interventions such as the creation of large openings (Jobsveem, Rotterdam) or enormous superstructures (Fenixloodsen (warehouses), Rotterdam). These are extreme interventions, with the presence of the heritage remaining the dominant factor; it becomes as it were a free-rider on the renovation to provide it with new significance, prominence and visibility in the city. This respectful attitude towards the cultural heritage value, without running away from renewal, can also be seen in the many transformations carried out by diederendirrix architects. It is not a coincidence that all these architects operate in Rotterdam and Eindhoven: modern cities in the midst of transformation, where the architectural image is not yet fully solidified but where history is visible, with a decisive influence on the quality and the potential of the city. The challenge is to also give the poetry of the site an effective voice in the design.

At the stations of the Dutch Railways, the heritage cannot possibly be regarded as something static. By virtue of their function they are dynamic sites, with growing numbers of travellers and major changes in programming. In De Collectie (The Collection), the railway sector has established a number of outstanding stations, with the aim of including the heritage values in the transition processes which are inherent to stations. Thanks to De Collectie, the uniformity of interventions is broken and network demands (speed, capacity, safety, commerce) are increasingly better and more obviously aligned with the existing quality and the spatial logic of each separate outstanding station ensemble. On less dynamic sites, where the architectural image is much more fixed, the design brief shifts to the interior (churches), technology (upgrading of offices) or to combining different functions in an often far from obvious way.

The design on or around heritage is all about open-mindedness, doing justice to the cultural heritage value, daring to opt for a radical intervention if necessary, making history visible in the innovative city, and responding to the poetry of the site – and all this in appropriate measures. The architectural style (modern or traditional, contrast or symbiosis) does not really matter all that much, as long as the attitude is to design on the basis of the existing qualities and to carefully develop the detailed design.

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Colophon

Heritage-based design

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